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CIC Migration

Installation and Configuration

Abstract

This document provides the planning considerations and procedures for CIC 2.4/3.0 to 2015 R1 or later migrations, and if applicable, Interaction Dialer 2.4/3.0 to 2015 R1 or later migrations.

For the latest version of this document, see the PureConnect Documentation Library at: http://help.genesys.com/cic.

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Getting Started

Introduction

This section discusses minimum requirements for migrations and the scope of the current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package.

New CIC distribution model

The CIC product suite has a new distribution model with new naming, faster release cycles, and higher quality. The new distribution model is based on the mainline continuous development of CIC 4.0, expressed in the 20## R# Patch# format.

CIC releases

- CIC 4.0 SU 6 was the last release using the older model. CIC 2015 R1 is first release of the new distribution model.
- CIC 2015 R1 or later releases consist of new features, enhancements, and bug fixes.
- CIC 2015 R1 or later release components are .msi files.
- Each CIC 2015 R1 or later release functions as a new CIC installation and as an update to existing CIC installations.
- CIC 2015 R1 or later can applied to any CIC 4.0 SU.

CIC patches

- Patches are a feature of the new distribution model.
- A patch is a package of Engineering Specials (bug fixes only) created for a CIC 20## R# release, cumulative of previous patches, distributed every two weeks.
- CIC 2015 R1 Patch1 and later patch components are `.msp` files.

For more information, see https://my.inin.com/products/cic/Pages/Releases-and-Patches.aspx.

> **Note:** For the purposes of this guide, *CIC* generally refers to CIC 2015 R1 or later, acknowledging that it is based on the continuous development of CIC 4.0. This document provides specific release/version numbers as needed.

PureConnect Documentation Library

You can access the PureConnect Documentation Library at https://help.genesys.com/cic.

Why migration instead of upgrade?

CIC server, database and Interaction Media Server changes in CIC 2015 R1 or later require a migration instead of an *in-place* upgrade.

- **CIC server**: The CIC 2015 R1 or later Microsoft Windows server operating system requirements make it necessary to migrate CIC configuration data from the existing CIC 2.4/3.0 server to a new CIC 2015 R1 or later server.
- **CIC database**: Changes to the database schema in CIC make it necessary to migrate some or all the data from the existing database to a new CIC database, instead of upgrading the existing database.
- **Interaction Media Server**: The Interaction Media Server operating system requirements make it preferable to migrate Interaction Media Server 3.0 configuration data to Interaction Media Server 2015 R1 or later (either a new Interaction Media Server 2015 R1 or later or an existing Interaction Media Server 3.0 appliance with an upgraded operating system).

If the workstation OS supports the CIC 2015 R1 or later client workstation applications, you can upgrade CIC client workstations to CIC 2015 R1 or later *in-place*, on the same computers.

Minimum requirements for migrations

This section describes the minimum requirements for CIC 2.4/3.0 to CIC 2015 R1 or later migrations.

CIC 2.4/3.0 server and workstations minimum migration requirements

- CIC 2.4 SU 47 or later (recommended), CIC 2.4 SU 33 (hard minimum)
  - OR -
  CIC 3.0 SU 14 or later (recommended), CIC 3.0 SU 11 (hard minimum)
- Interactive Update 1.0 SU 11 or later (on CIC 3.0 server and workstations)

CIC 2015 R1 or later server minimum migration requirements

- CIC 2015 R1 or later
- Interactive Update 2015 R1 or later

> **Note:**
> - Sites using Interaction Recorder and Interaction Tracker may need ESs and other procedures to meet the minimum requirements for migration, depending on the CIC 2.4/3.0 and 2015 R1 or later versions. For details, see Export CIC 2.4/3.0 Configuration Data and Prepare for CIC Database Migration.
> - For sites using Interaction Dialer, see Interaction Dialer.
> - For sites using Interaction Conference, see Appendix D: Interaction Conference Migration.
> - For sites using Interaction Director, see Appendix E: Interaction Director Migration.

Migration package overview

The current CIC 2.4/3.0 to CIC 2015 R1 or later migration package contains tools and documentation that support:
- Moving all users, phones, and functions from one CIC server (pair) to a new CIC server (pair) in one phase
- Database (Reporting, Interaction Recorder, Interaction Tracker) migrated by site ID, date range, and table groups (CIC 4.0 SU 3 and later)
- Existing CIC system uses VoIP (Dialogic HMP)
- Handler migration
- Managed IP phones migration (Polycom)
- Interaction Media Server migration
- Workstation application migration using Interactive Update or `Setup.exe`
- Language Pack migration (server and workstation)
- Interaction Recorder migration
- Interaction Dialer migration
- Interaction Conference migration
- Interaction Director migration

Migration package

Starting with CIC 2015 R2, the latest supported migration package distributes as a Migration `.iso`, available on the **Downloads** page at https://my.inin.com/products/Pages/Downloads.aspx. Previously, the migration package tools were available as separately released and posted downloads. The latest supported migration package supports the latest CIC release and patch. Always check the **Downloads** page for the latest supported migration package.

The migration package consists of the following tools:
- CIC Database Migration Assistant package
- Interaction Migrator
- IR Migration Prep Utility

Also:
- For the latest information about the migration package, see https://my.inin.com/products/cic/Pages/Migrations.aspx.
- For detailed instructions on running each of the migration tools, see the *CIC Migration Guide* (this document).

Migrations from pre-CIC 2.4 versions

Because versions of CIC before CIC 2.4 are End of Life (EOL), Genesys does not support or test migrations from pre-CIC 2.4 versions to CIC 2015 R1 or later. For information about product version End of Life, see https://my.inin.com/products/pages/product-version-end-of-life.aspx.

However, you can submit any known issues and workarounds related to migrating from pre-CIC 2.4 versions to PureConnect Customer Care. For more information about issues and workarounds, see Knowledgebase (KB) article: https://my.inin.com/Support/Pages/KB-Details.aspx?EntryID=Q133829957800212. The information within the KB article is not inclusive of all issues that you could encounter, and in no way implies support of any specific migration scenario.

Migration Planning

This section describes various migration planning considerations.

Notify PureConnect Customer Care about the migration

Contact PureConnect Customer Care to notify them about the migration and provide them with the following information: customer site name, customer site location, and customer site contact; hardware platform; a summary of your migration plans; and all available backup files.

If you need assistance with your migration plans or implementation, contact PureConnect Customer Care.

Upgrade your CIC and Interaction Media Server product licenses

This section describes the procedures for upgrading CIC and Interaction Media Server product licenses.

Review the CIC 4.0 License Upgrade Guide

Before you migrate to CIC 2015 R1 or later from an earlier release, convert your existing license to a 4.0 license.

> **Note:** Genesys hasn't changed CIC licensing with the new distribution model. You still need a CIC 4.0 license.

The CIC 4.0 License Upgrade Guide outlines licensing changes for CIC 4.0 in comparison to older releases, with an emphasis on CIC 3.0. This guide also includes CIC 4.0 license requirements, new and discontinued licenses, upgrading licenses, and options available during the conversion of licenses to the new release. For more information, see the *CIC 4.0 License Upgrade Guide* at https://my.inin.com/products/cic/Pages/Marketing-Collateral.aspx.

Obtain the CIC 4.0 license

Request a product upgrade and then generate the CIC 4.0 license.

> **Important!**
> You need a CIC 4.0 license file. The CIC system won't function correctly unless you load a CIC 4.0 license.

Request a product upgrade

Since version 4.0 has a different license in several areas of the product, request a product upgrade first so that Genesys can translate all old orders to the 4.0 license.

To request a product upgrade:
- Access the **License Management Web site** at http://license.inin.com/.
- Click **ININ CIC other products** and log on using your Genesys logon credentials. The **Account Summary** page appears, with a summary of all ordered items available to license for your account.
- Click **Click here to upgrade your product** and follow the posted instructions.
- Complete the upgrade request form on this page and submit it.

After you submit the **Product Upgrade Request** form, you receive a **4.0 License Translation form**. Review, sign, and submit this form to confirm that you and Genesys are in agreement on the contents of your license.

Order and generate a 4.0 production license

After the **4.0 License Translation** form processes, order and generate a 4.0 production license, and download it to the CIC server.

To order and generate a 4.0 production license:

1. Place the order for the CIC 4.0 product with Genesys.
2. After Genesys creates the account and processes the order, you can generate the license from the **License Management Web site** at http://license.inin.com/ using your Genesys logon credentials. Click **Manage Licenses** and follow the instructions for generating a new license.
3. When asked, provide the following computer information:
   - Host ID (Host ID is based on the MAC address of the network card on the CIC Server)
   - Machine Name
   - System Type (telephony platform)
   - Mail Connector (mail system)
4. After specifying your license selections, generate and view the license. The license file is $hostid$.i3lic.
5. Download the license file to the CIC server or location accessible from the CIC server.

Interaction Media Server upgrades

Interaction Media Server upgrades currently vary depending on your requests. You may have to contact License Management for requests to upgrade Interaction Media Server from 3.0 to 4.0 or to upgrade Interaction Media Server software only.

In the future, you can process an Interaction Media Server upgrade request exclusively from the License Management web site.

Upgrade Interaction Media Server from 3.0 to 4.0

Currently, when you request to upgrade Interaction Media Server from 3.0 to 4.0 from the License Management website, certain required Interaction Media Server information doesn't appear. To complete the upgrade request, contact License Management at licenseissues@inin.com with the following information:

- The Interaction Media Server's Host ID
- The Interaction Media Server's serial number

License Management returns an email confirmation, processes your request, and, on approval, provides instructions on how to generate and download the Interaction Media Server 4.0 license.

Upgrade Interaction Media Server software only

The option to upgrade Interaction Media Server software only is not available on the License Management website at this time. To upgrade Interaction Media Server software only, email License Management at licenseissues@inin.com with the software option you want to upgrade to 4.0.

License Management returns an email confirmation, processes your request, and, on approval, provides instructions on how to generate and download the requested software license(s).

CIC configuration data migration

The current release of the CIC 2.4/3.0 to CIC 2015 R1 and later migration package supports migrating all users and CIC configuration data at the same time using Interaction Migrator. For more information, see Export CIC 2.4/3.0 Configuration Data and Import CIC 2.4/3.0 Configuration Data.

A future release of the migration package will contain an additional tool that supports migrating users and CIC configuration data at different times (phased migration).

CIC database migration

The current release of the migration package supports migrating the CIC database (Reporting, Interaction Tracker, Interaction Recorder) by site ID, date range, and table groups using CIC Database Migration Assistant. For more information, see Install CIC Database Migration Assistant, Prepare for CIC Database Migration and Migrate the CIC 3.0 Database.

Note: For information about Interaction Dialer database scenarios, see Interaction Dialer.

CIC database migration scenarios

There are two scenarios for migrating from a CIC 3.0 database to a CIC 2015 R1 or later database. The method you use depends on your situation.

- **One-to-one migration**: The current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package supports only one-to-one migrations. This scenario is the recommended method for migrating from a CIC 3.0 to a CIC 2015 R1 or later database. A one-to-one migration scenario migrates a single CIC 3.0 database to a single CIC 2015 R1 or later database. You could have multiple CIC 3.0 and CIC 2015 R1 or later databases; however, you are migrating on a one-to-one basis. So, for each CIC 3.0 database, you have a corresponding CIC 2015 R1 or later database you are migrating to.
- **Many-to-one migration**: A many-to-one migration scenario migrates two or more CIC 3.0 databases to a single CIC 2015 R1 or later database. Run it again to migrate each subsequent CIC 3.0 database to the same CIC 2015 R1 or later database. If you are migrating multiple databases that contain data with identical site IDs, extra manual steps are necessary to prepare this data for migration. Contact PureConnect Customer Care for assistance with this scenario.

Interaction Optimizer

The current release of the migration package supports an *all in one* bulk migration of Interaction Optimizer data. Mixing the data between CIC 3.0 and CIC 2015 R1 or later is not supported. When you run the CIC Database Migration Assistant as described in *Migrate the CIC 3.0 database*, and select the *Optimizer Group*:

- ALL 3.0 Interaction Optimizer records (not restricted by date range or Site ID) import to the target database as long as there are no 2015 R1 or later Interaction Optimizer records in the target database.

  > **Note:** You can delete the 4.0 Optimizer records by running the `Delete_Optimizer_Tables_PreMigration.sql` script located in the `\Scripts` folder in the CIC Database Migration Assistant installed folder **before** migrating the CIC database.

- Ensure that all Optimizer agents go live on the new 4.0/2015 R1 or later environment after you migrate Optimizer data contained in the database. This confirmation ensures that no mixing of data between CIC 3.0 and CIC 2015 R1 or later occurs.

Telephony

CIC is now a pure application server, a shift that eliminates the need for third-party voice hardware or HMP software. In place of voice hardware and HMP, Genesys upgraded Interaction Media Server to handle all CIC audio needs.

The current release of the migration package supports migrating existing CIC 2.4/3.0 systems with VoIP (Dialogic HMP) only.

A future release of the migration package will support migrating existing CIC 2.4/3.0 systems with TDM (Dialogic Board-based, Aculab, and AudioCodes). This migration will involve a plan for moving from TDM to SIP.

Switchover

The current release of the migration package assumes that customers are using new computers for their CIC 2015 R1 and later servers and setting up a new CIC 2015 R1 and later Switchover pair.

For more information about using Interaction Migrator in Switchover environments, see the *Interaction Migrator Technical Reference*.

A future release of the migration package will support breaking the Switchover pair and upgrading in place.

Handlers

CIC base handlers change substantially in each release. Before importing CIC 2.4/3.0 configuration data with Interaction Migrator, inventory each modified base handler. After importing the CIC configuration data, modify and publish the base handlers on the CIC 2015 R1 and later server. Interaction Migrator does not publish or manage custom handlers. Interaction Migrator places the handlers from the export into the designated extraction folder. Publish and manage custom handlers manually post-migration.

For more information, see [Migrate CIC 2.4/3.0 Handlers](#).

Managed IP phones

The migration package supports migrating CIC 3.0 managed IP phones from a CIC 3.0 system to a CIC 2015 R1 or later system.

Of the three managed IP phone types:
- Genesys tested and documented the migration of CIC 3.0 managed Polycom phones to CIC 2015 R1 or later for the current release of the migration package. For more information, see Migrate CIC 3.0 Managed IP Phones.
- Genesys plans to test and document migration of CIC 3.0 Interaction SIP Station and SIP Soft Phones to CIC 2015 R1 or later in a future migration package release.

Non-managed IP phones

For CIC 2.4 sites or CIC 3.0 sites with non-managed IP phones, Genesys recommends converting to or creating new managed IP phones. For more information, see Recommendations for non-managed IP phones.

Interaction Media Server

The current release of the migration package supports migrating Interaction Media Server 3.0 configuration data to Interaction Media Server 2015 R1 or later in the following scenarios:
- New Interaction Media Server 2015 R1 or later appliance
- Existing Interaction Media Server G6 3.0 appliance upgraded to 2015 R1 or later
- Existing Interaction Application Server (IAS) G7 or CIC Server G7 3.0 appliance used as Interaction Media Server upgraded to 2015 R1 or later

Each scenario uses Interaction Migrator to export and import Interaction Media Server 3.0 certificate, configuration data, and resources to Interaction Media Server 2015 R1 or later. For existing 3.0 Interaction Media Server appliances, the migration requires other utilities to upgrade the appliance to Interaction Media Server 4.0. For more information, see Migrate Interaction Media Server.

A future migration package release will support migrating existing Interaction Media Server 3.0 appliances to 2015 R1 or later using an external USB key that automates the migration tasks.

Interaction Media Server 2.4

Existing Interaction Media Server G5 and G6 2.4 appliances meet the minimum hardware requirements to support Interaction Media Server 4.0. However, there is no migration path for their configuration because Interaction Migrator does not support exporting Interaction Media Server 2.4 configuration.

The only upgrade path available currently is to wipe the server clean and follow the procedures outlined in the *Interaction Media Server Technical Reference* in the PureConnect Documentation Library to install a new *software only* media server, including manually reconfiguring the server.

Workstations

If the workstation OS supports the CIC 2015 R1 client workstation applications, the migration package supports migrating/upgrading client workstation applications on existing CIC 3.0 workstations to CIC 2015 R1 or later on the same computer. For workstation migration planning considerations, see Workstation Migration Planning.

Language Packs

For sites with one or more CIC Language Packs installed on the CIC 2.4/3.0 system, the migration package supports:
- Migrating localized custom Interaction Attendant wave files, handlers, and prompts as part of the CIC configuration data migration using Interaction Migrator. For more information, see Export CIC 2.4/3.0 Configuration Data and Import CIC 2.4/3.0 Configuration Data.
- Upgrading localized client workstation applications. For more information, see Migrate Client Workstations.

As part of your migration planning, see the languages supported in CIC and the scope of localization for each language at https://my.inin.com/products/cic/Pages/Localization.aspx.

Custom applications

Genesys deprecated the Interaction Client Win32 COM API (ClientCOM API) in CIC 4.0 and doesn't support it in any future releases. In CIC 4.0, client application functionality and features implement through the CIC Extension Library (IceLib) API. You must recompile and test any extensions or customizations developed for the CIC 2.4/3.0 system against the 2015 R1 or later IceLib API. If these extensions leverage ClientCOM, Genesys strongly recommends refactoring the extensions using IceLib to maintain forward compatibility. For more information, see System APIs Help in PureConnect Documentation Library.

Custom reports

Database views drive predefined CIC reports. Many tables in the database schema have undergone significant changes. Despite these changes, the reporting views that exist in CIC 3.0 SU 14 carry forward to CIC 2015 R1 or later. The definitions of these views are modified to present the reporting data in a compatible format. If you developed custom reports using these standard views, test these reports after migrating the database. If custom reports reference tables in CIC 3.0 directly, or customizations that include stored procedures reference tables in CIC 3.0 directly, you must redevelop the reports.

We strongly recommend redeveloping your custom reports for the CIC 2015 R1 or later report structure when practical.

Interaction Dialer

Existing Interaction Dialer 2.4/3.0 systems must migrate to Interaction Dialer 4.0 as part of the CIC 2.4/3.0 to 2015 R1 or later migration process.

Interaction Dialer license upgrades

Review *CIC 4.0 Licensing Upgrade Guide* at https://my.inin.com/products/cic/Pages/Marketing-Collateral.aspx for information on Interaction Dialer 4.0 licenses needed for Interaction Dialer 3.0 to 2015 R1 or later migrations.

Obtain the Interaction Dialer 4.0 licenses needed for your site.

Interaction Dialer migration requirements

The minimum requirements for Interaction Dialer 2.4/3.0 to 4.0 migrations are:
* Interaction Dialer 2.4/3.0 servers and workstations
* Interaction Dialer 2015 R1 or later servers and workstations

Interaction Dialer 2.4/3.0 servers and workstations

Interaction Dialer 2.4 SU 19 or later

-OR-

Interaction Dialer 3.0 SU 10 or later

Interaction Dialer 2015 R1 or later servers and workstations

* CIC 2015 R1 or later
* Interaction Dialer 2015 R1 or later

Interaction Dialer migration scenarios

The current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package supports only one-to-one CIC/ODS server migrations. Multiple CIC/ODS server environments must create a 2015 R1 or later ODS server for each existing 2.4/3.0 CIC/ODS server and migrate the configuration data on a one-to-one basis.

The current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package does *not* support the following Interaction Dialer 2.4/3.0 to 2015 R1 or later migration scenarios:
* Multiple source CIC/ODS servers into a single target CIC/ODS server
* Single source CIC/ODS servers into a multiple target CIC/ODS server

Interaction Dialer configuration and database migration summary

- Interaction Migrator exports and imports Interaction Dialer configuration data along with the CIC configuration. Run Interaction Migrator to migrate the CIC and Dialer configuration on each CIC/ODS server in your implementation.
  - Interaction Migrator sets the `Launch Dialer Migration Package Processor` server parameter to `1` upon import. Dialer server sets the parameter to 0 upon a successful import or if it is unable to find a `dialer_migration.zip` file.
  - The migration creates an event log entry to indicate when the package processor started and when the package processor completed. The completed entry indicates that the migration was successful, successful with errors, or failed. If migration includes error or fails, the log entry refers to the trace logs for more details.

- CIC Database Migration Assistant has two modes: one for migrating the CIC database and one for migrating the Interaction Dialer database. First, run CIC Database Migration Assistant to migrate the CIC database. Second, run CIC Database Migration Assistant for Dialer to migrate the Interaction Dialer database.

Interaction Dialer migration considerations and caveats

This section describes the Interaction Dialer 2.4/3.0 components that migrate to 2015 R1 or later, the unsupported components in and/or migrated to 2015 R1 or later, and other caveats.
- Interaction Dialer custom configurations, campaigns that reside in active Workflows, Policy Set and Rule Set objects, Email Rules, and Dialer's [Default Connection] migrate.
- Campaigns not contained within an active workflow don't migrate.
- Default configurations (except Dialer's [Default Connection]) don't migrate.
- Reason and Finish Codes translate during the migration into Wrap-up Codes and Wrap-up Categories.
- Paging support is obsolete and, therefore, Pager Rule actions and Policy behaviors don't migrate.
- Workflow rules and actions map to the corresponding campaign rule actions after migration.

Interaction Dialer migration documentation

The Interaction Dialer migration is highly integrated in the CIC migration process. As appropriate, this document contains:
- References to Interaction Dialer in sections that describe a specific CIC 2.4/3.0 to 2015 R1 or later migration procedure in which the migration includes Interaction Dialer components automatically.
- Interaction Dialer-related sections that describe a specific CIC 2.4/3.0 to 2015 R1 or later migration procedure, containing extra tasks to complete for the Interaction Dialer migration.
- Interaction Dialer-specific sections that describe an Interaction Dialer 2.4/3.0 to 2015 R1 or later only migration procedure.

Interaction Conference

Existing Interaction Conference 3.0 systems must migrate to Interaction Conference 2015 R1 or later as part of the CIC 3.0 to 2015 R1 or later migration process.

For more information, See Appendix D: Interaction Conference Migration.

Interaction Director

> **Note:** Interaction Director 2015 R1 or later is not available currently.

Existing Interaction Director 2.4 systems must migrate to Interaction Director 4.0 as part of the CIC 2.4/3.0 to 4.0 migration process.

For more information, see Appendix E: Interaction Director Migration.

Guidelines for creating your migration environment

After you review the migration tasks summarized in the Migration Checklists and described in detail throughout the guide, see Appendix A: Guidelines for Creating Your Migration Environment. It contains guidelines for creating a migration environment for your own implementation. The guidelines are based on pre-release testing of the CIC 2.4/3.0 to 4.0 migration package at various customer beta sites.

Export CIC 2.4/3.0 Configuration Data

This section describes exporting CIC 2.4/3.0 configuration data using Interaction Migrator.

Interaction Migrator Installation

This section describes Interaction Migrator requirements and installation.

About Interaction Migrator

Interaction Migrator is a versatile, version-independent utility that exports and imports configuration data related to the CIC server, Interaction Media Server, and other components of the CIC. You can use Interaction Migrator as part of a migration from one CIC version to another, or for recovery and version control.

As part of the migration from CIC 2.4/3.0 to CIC 2015 R1 or later, you can use Interaction Migrator to:

- Export **CIC 2.4/3.0 configuration data** and custom handlers and import them to a CIC 2015 R1 or later server. The version of Interaction Migrator included in the current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package supports migrating **Interaction Dialer**, **Interaction Conference**, and **Interaction Director** configuration data on the CIC server along with the CIC configuration data.
- Export **Interaction Media Server 3.0** certificates, configuration data, and resources and import them to an Interaction Media 2015 R1 or later server. Genesys introduced support for Interaction Media Server with the initial release of the CIC 2.4/3.0 to CIC 4.0 migration package.

Use with care: Genesys tested this tool extensively both internally and at customer beta sites. However, the complexities of customized systems can create unforeseen variables that this tool may not handle. Ensure that you backed up any system on which you plan to run this tool. Have a well-designed *and exercised* back out plan and a thorough test plan to verify all functions processed using this tool.

Interaction Migrator-related documentation

- This *CIC Migration Guide* contains the complete instructions for migrating from CIC 2.4/3.0 to CIC 2015 R1 or later.
- The *Interaction Migrator Technical Reference* contains information about using Interaction Migrator for other migration scenarios, and for recovery and version control. It also contains instructions for using Interaction Migrator Console, an MS-DOS version of Interaction Migrator that uses command-line switches to export and import the configuration data. The *Interaction Migrator Technical Reference* is available in the PureConnect Documentation Library.

Interaction Migrator version information

The tools in the latest supported migration package support the latest CIC release and patch. The CIC Database Migration Assistant and Interaction Migrator installs indicate the CIC release version, for example, `Migrator_2015_R2.msi`. The CIC Database Migration Assistant and Interaction Migrator installs no longer contain the build version number in the install filename. However, once installed, the build version number is still available on the **Welcome** page in the lower right corner.

Interaction Migrator directory

When you install Interaction Migrator on the CIC server or Interaction Media Server, the install creates a folder containing the Interaction Migrator executable and other files. The folder location is as follows:

Server	Folder Location
CIC server	`\I3\CIC\Migrator`
Interaction Media Server 3.0	`C:\Program Files\Interactive Intelligence\Migrator`
Interaction Media Server 2015 R1 or later	`C:\Program Files (x86)\Interactive Intelligence\Migrator`

Interaction Migrator Tracing

Interaction Migrator uses the same tracing functionality as CIC 2015 R1. The Interaction Migrator install includes the trace configuration and log viewer utilities. The default output directory for the trace logs is the `inin_tracing` folder under the user's temp directory (`%temp%\inin_tracing`.) Tracing is always on by default and logs generate only when Interaction Migrator is running.

Registry backup

By default, the **Interaction Migrator import creates a registry restore point**, which allows you to restore the registry to its original point before you ran the Interaction Migrator import. Interaction Migrator exports from the `HKLM\Software\Interactive Intelligence` key.

When you select the **Create registry restore point** option, Interaction Migrator runs a registry export of the `Interactive Intelligence` key in hive format. This file is in the folder where you installed Interaction Migrator and has a file name extension of `.hive`.

Structured parameters

If your CIC system includes structured parameters created with the type `Secrets`, reset the values after the import. The reason is that these structured parameters are encrypted with a computer-specific key that the Admin Server generated.

There is no way to either migrate this key or decrypt the parameters before exporting. You must reset the structured parameter values after the import.

Encryption

Interaction Migrator encrypts the contents of export files using AES 256-bit encryption. AES256 encryption is PCI (Payment Card Industry) compliant.

Fulfil Microsoft .NET Framework requirements

For each CIC server and Interaction Media Server that you intend to export or import data as part of the migration, ensure that you installed the Microsoft .NET Framework version that the CIC version supports.

- PureConnect 2018 R4 or later and Interaction Media Server 2018 R4 or later require Microsoft .NET Framework 4.7 or later and Microsoft .NET Framework 3.5.1. For more information, see https://help.genesys.com/cic/desktop/software_requirements.htm.
- CIC 2015 R1 through 2018 R3 and Interaction Media Server 2015 R1 through 2018 R3 require Microsoft .NET Framework 4.5.2 or later and Microsoft .NET Framework 3.5.1. For more information, see https://my.inin.com/products/cic/Pages/Software-Requirements.aspx.
- CIC 3.0 and Interaction Media Server 3.0 require Microsoft .NET Framework 3.0. For more information, see https://my.inin.com/products/ic30/Pages/Software-Requirements.aspx.
- Pre-CIC 3.0 versions did not have a Microsoft .NET Framework requirement. For Interaction Migrator, ensure that you installed Microsoft .NET Framework 2.0 or later. There are no pre-Interaction Media Server 3.0 versions so this bullet point doesn't apply to Interaction Media Server.

Interaction Migrator Installation

Install Interaction Migrator on the CIC 2.4/3.0 server so that you can export the configuration data, as described in Install Interaction Migrator. Migrate Interaction Media Server 3.0 also refers to this procedure for installing Interaction Migrator on Interactive Media Server 3.0 and Interactive Media Server 2015 R1 or later. To migrate from Interaction Media Server 3.0 to Interaction Media Server 2017 R1 or earlier:

- Install Interaction Migrator 2017 R1 on the Interaction Media server 3.0 to export configuration data.
- Install Interaction Migrator 2017 R1 on the Interaction Media server 2017 R1 or earlier to import configuration data.

To migrate from Interaction Media Server 3.0 to Interaction Media Server 2017 R1 or later:

- Install Interaction Migrator 2017 R1 on the Interaction Media server 3.0 to export configuration data.
- Install the latest version of Interaction Migrator on the Interaction Media server 2017 R1 or earlier to import configuration data.

Export CIC 2.4/3.0 Configuration Data

This section describes exporting CIC 2.4/3.0 configuration data using Interaction Migrator.

CIC configuration data migration export

The current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package supports migrating all users, phones, and functions from one CIC 2.4/3.0 server (pair) to a new CIC 2015 R1 or later server (pair) in one phase using Interaction Migrator. A future release of the migration package will contain an extra tool that supports migrating users and CIC configuration data at different times (phased migration).

Interaction Dialer configuration data migration

Interaction Migrator exports and imports Interaction Dialer 2.4/3.0 configuration data along with the CIC 2.4/3.0 configuration data.

Multiple CIC/ODS servers (CIC 4.0)

The current release of the CIC 2.4/3.0 to CIC 4.0 migration package supports only one-to-one ODS server migrations. Multiple CIC/ODS server environments must create a 2015 R1 or later CIC/ODS server for each existing 2.4/3.0 CIC/ODS server and run Interaction Migrator to migrate the CIC and Interaction Dialer configuration data on a one-to-one basis.

Run the Interaction Recorder Migration Prep Utility

If you use Interaction Recorder, you may need to run the Interaction Recorder Migration Prep Utility before exporting CIC data. The Interaction Recorder Migration Prep Utility moves the Interaction Recorder category configuration into Directory Services. This process is necessary so that Interaction Migrator can generate the required security and retention policies when you import the CIC data.

Who should run the Interaction Recorder Migration Prep Utility?

If you use Interaction Recorder, run the utility under the following conditions:

CIC 3.0 to CIC 2015 R1 or later migrations:
- If you are on a CIC 3.0 version **earlier** than CIC 3.0 SU 14, run the Interaction Recorder Migration Prep Utility 3.0.
- If you are on CIC 3.0 SU 14 or later, you don't need the Interaction Recorder Migration Prep Utility 3.0.

Run the Interaction Recorder Migration Prep Utility

1. Ensure that the CIC server 3.0 is running and connected to the database.
2. Locate the Interaction Recorder Migration Prep Utility zip file, for example, `IRMigrationPrep_30.zip`, on the Migration `.iso`.
3. Richt-click the `.zip` file and save it.
4. Extract the contents of the Interaction Recorder Migration Prep Utility zip file to any location **except** where you have CIC server installed (for example, do not install to `\I3\CIC\Server`.)
5. Open the folder where you extracted the `.zip` file, type `IRSvrCategoryU.exe`, and then press **Enter**. After the utility runs, a message displays indicating the process is complete.
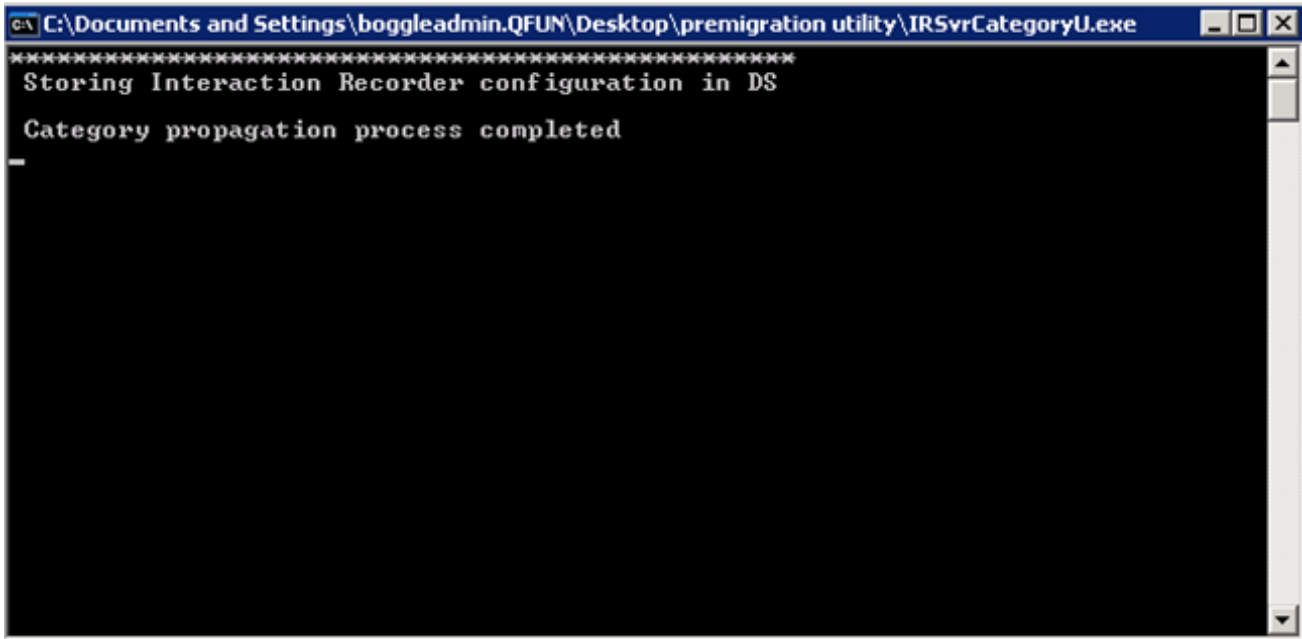
6. Click **Start -> Run**, type `DSEDITU.exe`, and the press **Enter**.
7. In the **DSEdit** window, in the **Interaction Recorder** object class, verify that the **CategoryXML** attribute exists.
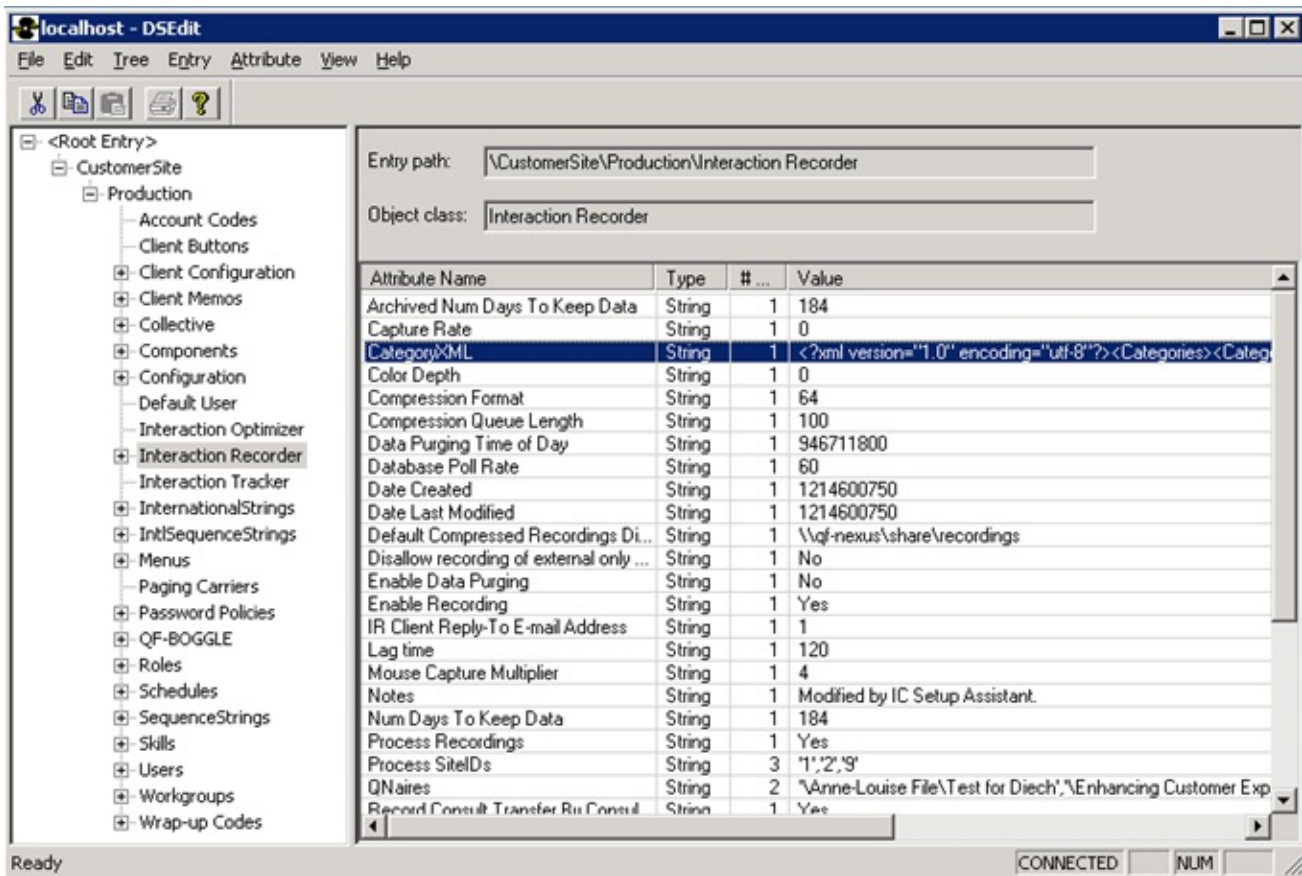
Handler pre-migration procedures

Interaction Migrator does not publish or manage custom handlers. If you use custom handlers, follow the handler pre-migration procedures in Migrate CIC 2.4/3.0 Handlers *before* exporting the CIC 2.4/3.0 configuration data.

Complete Interaction Dialer pre-migration procedures

Before you run Interaction Migrator to export the CIC and Interaction Dialer 2.4/3.0 configuration data, complete the following Interaction Dialer migration requirements. When you run Interaction Migrator to export the CIC configuration data, it asks for the location of the UDL files and the Dialer configuration file to extract the information it needs to export the Dialer configuration data.

> **Note:** Genesys recommends copying these files directly from the CIC server to the CIC/ODS server, rather than using a network share.

Copy the UDL folder from the CIC server to the CIC/ODS 2.4/3.0 server

1. Copy the UDL folder from `\i3\CIC\server\UDL` on the CIC server.
2. Create an `\i3\CIC\server\UDL` directory on the CIC/ODS server and place the UDL folder in that directory.
3. Interaction Migrator looks in the exact location that you specify so match your path names carefully.

Copy the Dialer configuration file from the CIC server to the CIC/ODS 2.4/3.0 server

1. Copy the Dialer configuration file (`dialer_config.xml`) from the `\i3\CIC\server` directory on the CIC server.
2. Place the Dialer configuration file in the `i3\CIC\server` directory on the CIC\ODS server.
   Interaction Migrator looks in the exact location that you specify so match your path names carefully.

Export CIC 2.4/3.0 configuration data using Interaction Migrator

This procedure describes how to export CIC 2.4/3.0 configuration data using Interaction Migrator.

Interaction Dialer: If this is a CIC/ODS server, Interaction Migrator asks for the location of the Dialer configuration file so that you can specify the Dialer configuration data to export.

To export CIC 2.4/3.0 configuration data:

1. **Stop CIC Service**.

   > **Note:** Though not required on export, Genesys recommends that you stop CIC Service on the CIC 2.4/3.0 server before starting Interaction Migrator to avoid a switchover or any call interruptions. If running in a switchover pair, you can stop your backup server and do the export on that computer. If you cannot stop CIC Service, the alternative is to run Interaction Migrator Console. For more information, see the *Interaction Migrator Technical Reference*.

2. Start Interaction Migrator on the CIC 2.4/3.0 server, either from the Interaction Migrator link on the desktop, or from **Start->Programs->Interactive Intelligence->Interaction Migrator**.

3. On the **Welcome** page, click **Next**.
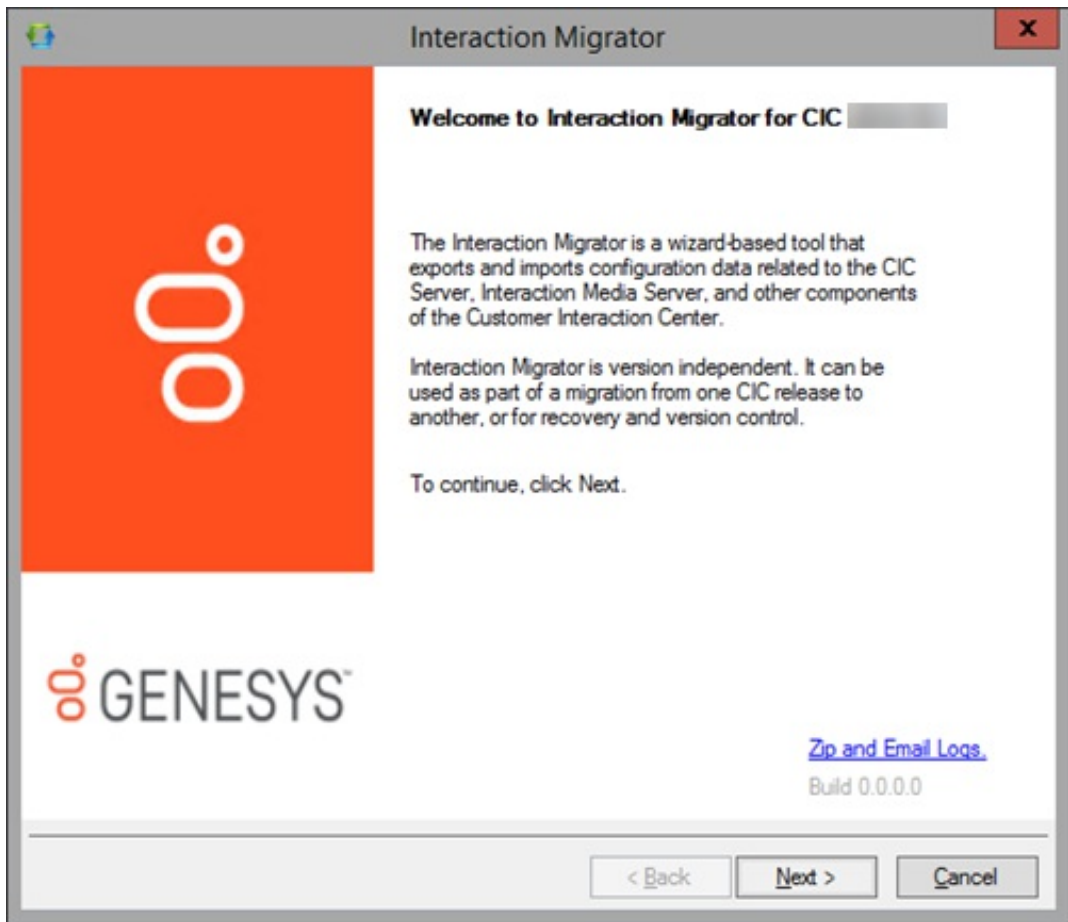
Welcome to Interaction Migrator for CIC ▮▮▮▮▮

The Interaction Migrator is a wizard-based tool that exports and imports configuration data related to the CIC Server, Interaction Media Server, and other components of the Customer Interaction Center.

Interaction Migrator is version independent. It can be used as part of a migration from one CIC release to another, or for recovery and version control.

To continue, click Next.

Zip and Email Logs.

Build 0.0.0.0

< Back   Next >   Cancel

If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.

4. On the **Task Selection** page, click **Export configuration data** and then click **Next**.
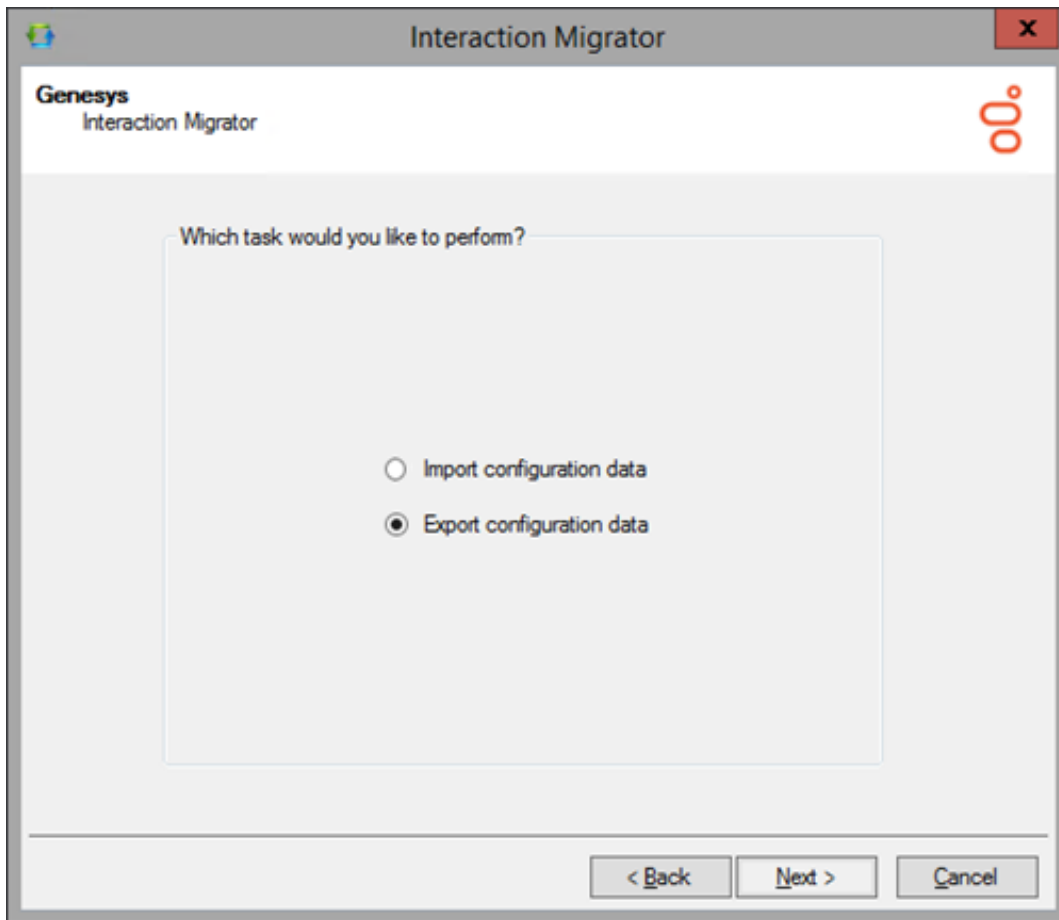
5. On the **Data Component Selection** page, ensure that **Select All** is selected (default) to export all data components.

> **Notes:**
> ○ Genesys recommends that you keep **Select All** selected (default) to export all data components.
> ○ When you export users, you must also export workgroups to include workgroup memberships in the export.
> ○ The data components listed differ depending on the CIC version installed on the CIC server.
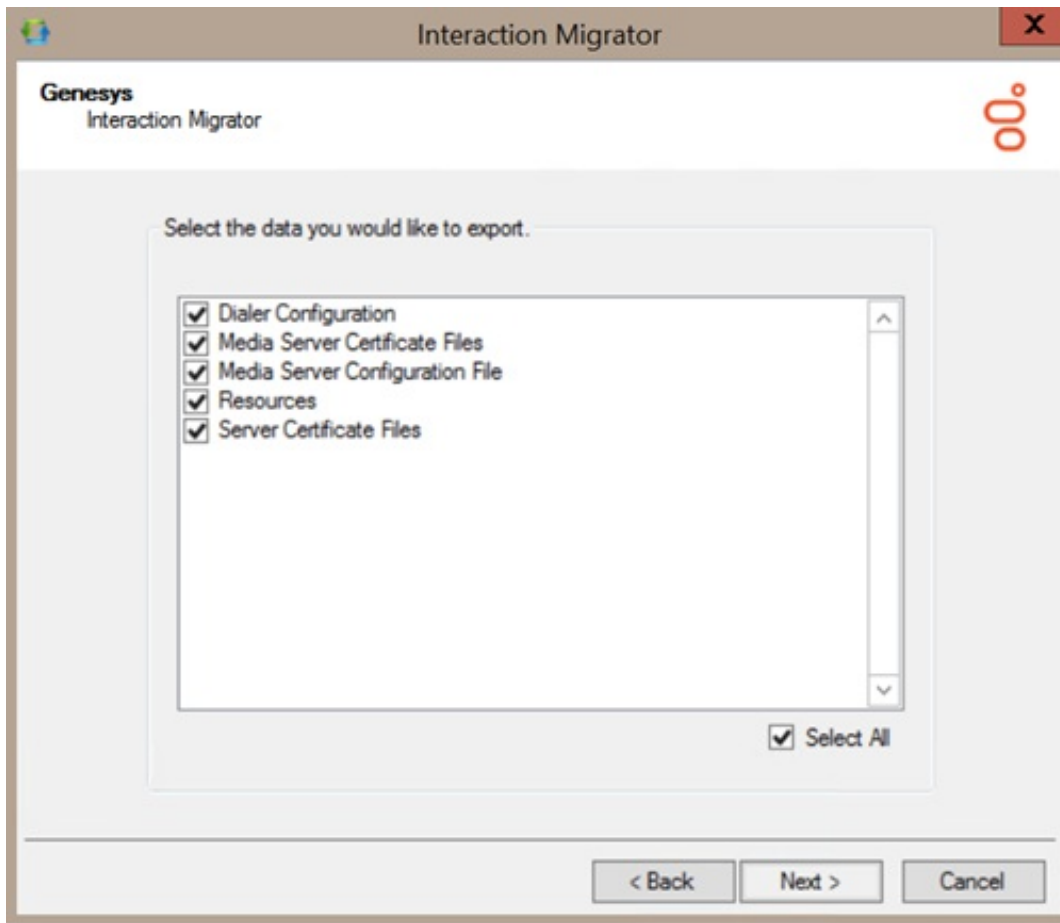
6. On the **Configuration** page, specify the directories for the exported data and custom handlers and then click **Next**.
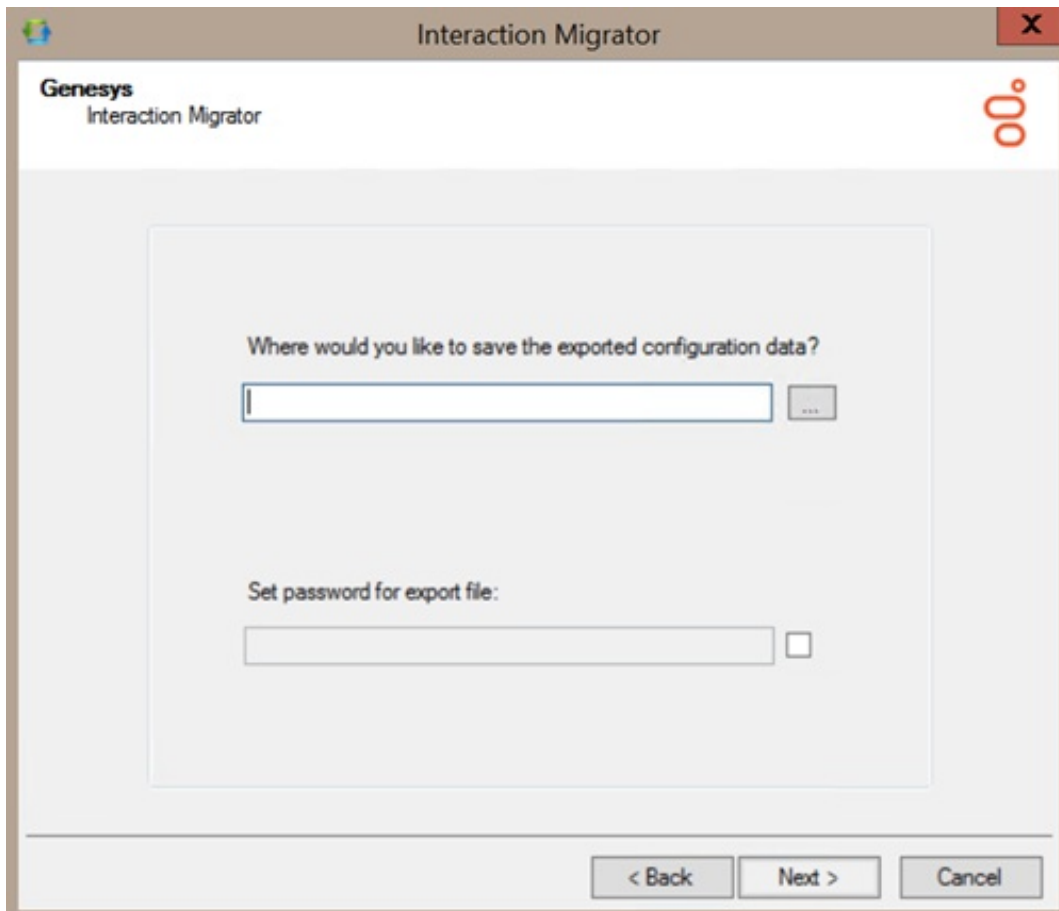
Where would you like to save the exported configuration data?

    Open the folder where you want to save the exported data, for example, `D:\Temp\ExportData`.

> **Important!**
> Do *NOT* select the root directory of the drive where you installed CIC (for example, do not save to the root of `\I3\IC`).

Browse to the location where you store your handler customizations

    Open the folder that contains the custom handlers. The CIC 4.0 install creates the **\I3\IC\Handlers\Custom** folder by default. You can use this folder or specify one you that created. Interaction Migrator includes all subdirectories in the migration.

Set password for export file

    The password setting is optional. The default selection does not set the password; however, you can set a password since the export file could contain sensitive data. If so, select the check box to specify the password. There are no limitations for setting the password.

7. On the **Export Confirmation** page, confirm the selections and then click **Next** to start the export process.

Interaction Migrator

Genesys
Interaction Migrator

Export Confirmation

Export File Path:C:\Users\echo_user\Desktop

The following nodes will be exported:

Dialer Configuration
Media Server Certificate Files
Media Server Configuration File
Resources
Server Certificate Files

[< Back] [Next >] [Cancel]
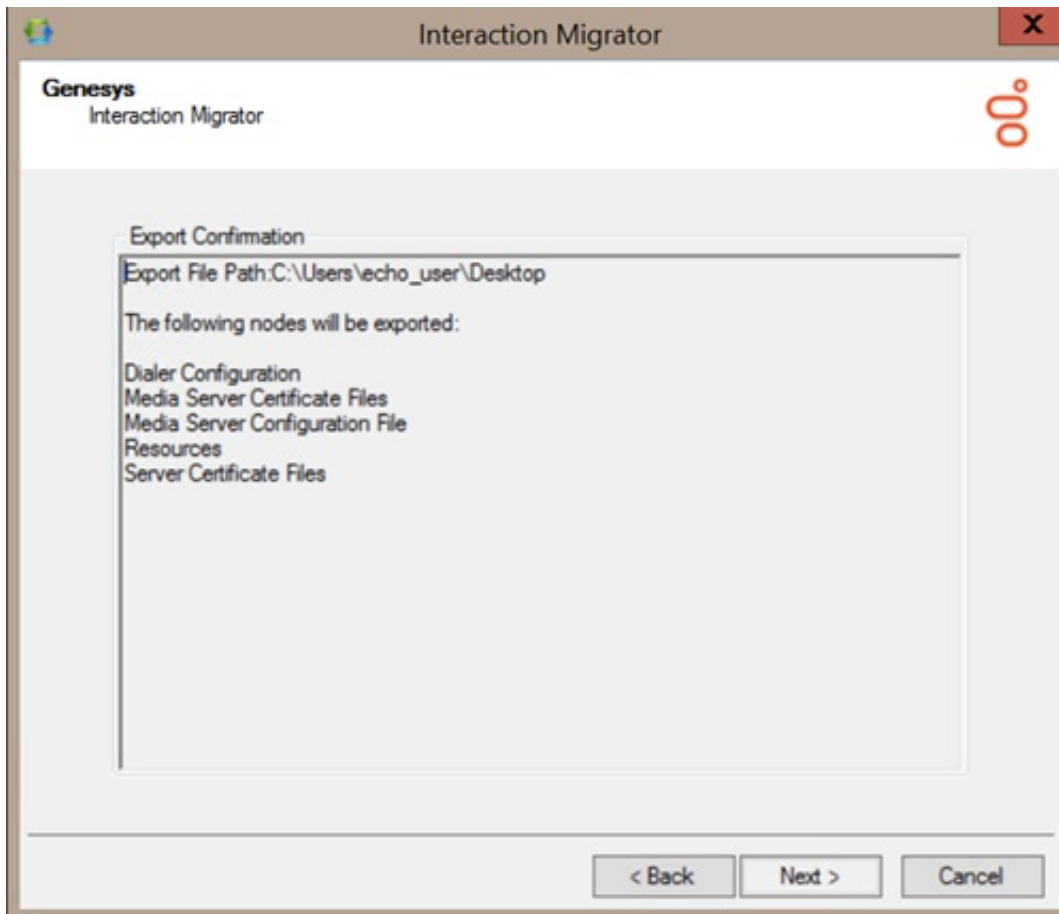
Note: To change any selections, click **Back**. After you complete your changes, start the export process again. Interaction Migrator creates a CIC configuration data file.

The **Export Status** page displays real-time updates during the export process.
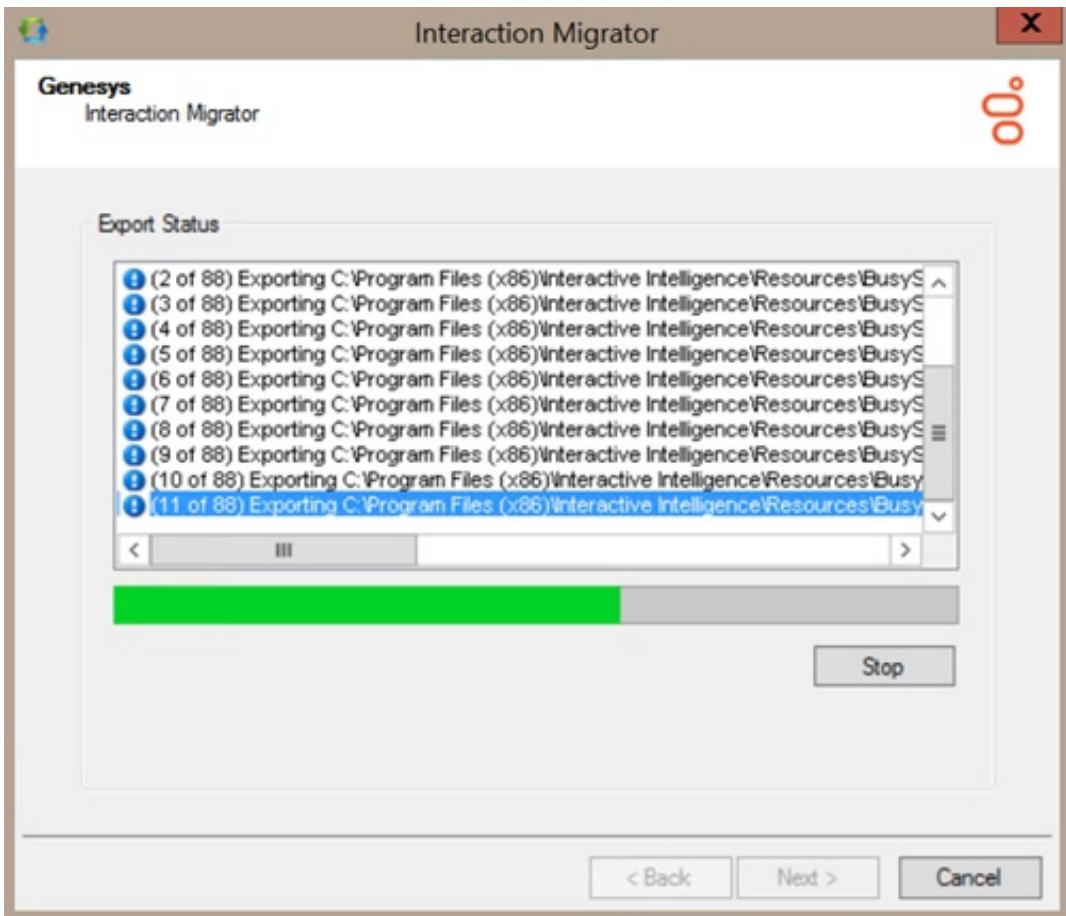
The export process can take several minutes, depending on the amount of data that Interaction Migrator is exporting.

Note: To stop the process at any time, click **Stop**. After stopping the process, you can go back and change any selections without exiting Interaction Migrator.

8. (**Interaction Dialer only**) If this is a CIC/ODS server, the **Dialer Configuration Migration** page displays.
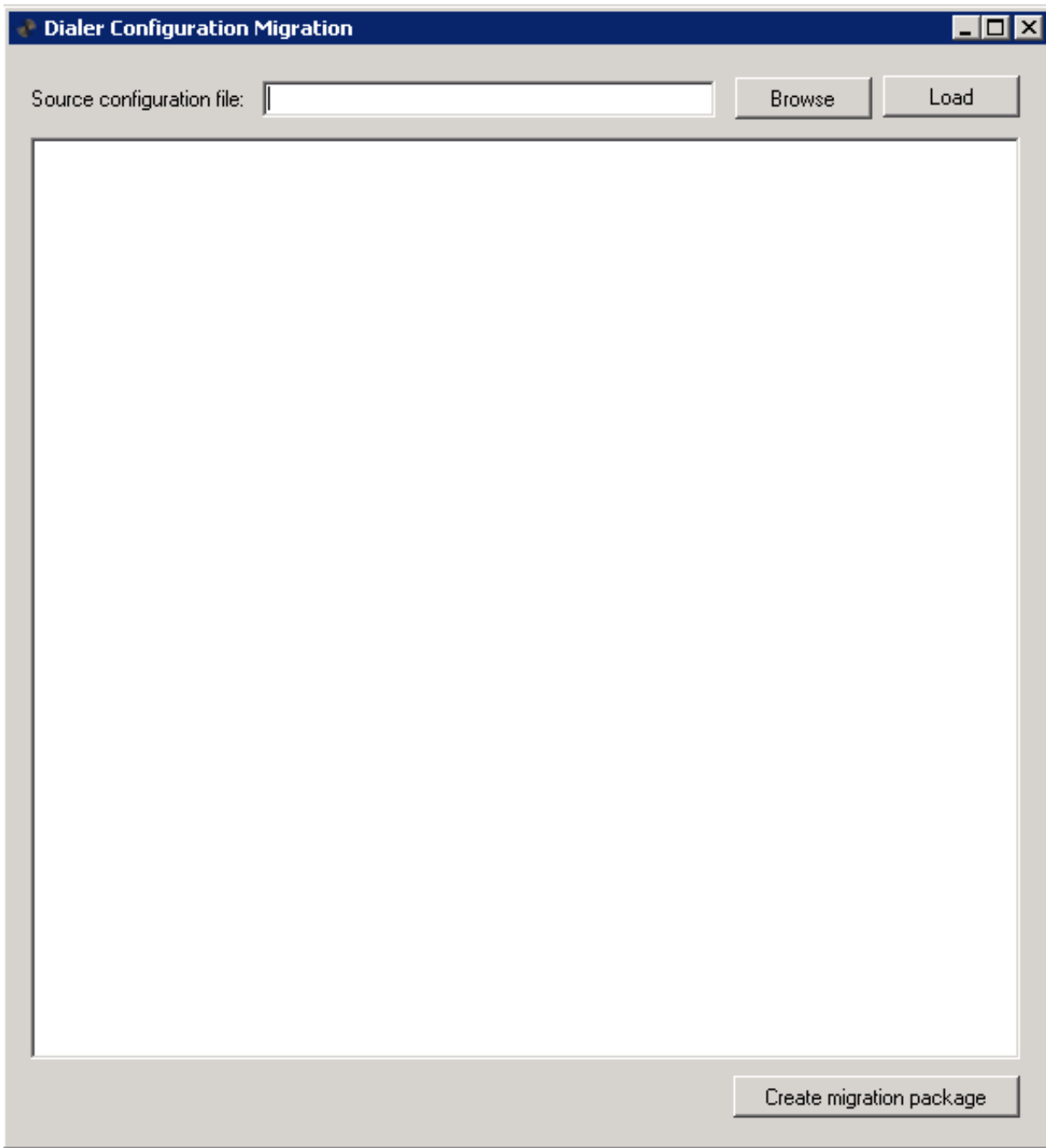
Browse to the location of the Dialer configuration file (`dialer_config.xml`) that you placed on the CIC/ODS server and click **Load**.

The contents of the Dialer configuration file appear on the **Dialer Configuration Migration** page.

9. (**Interaction Dialer only**) Expand the contents of the Dialer configuration file.
   - All data components are selected by default. Genesys recommends keeping the default selection.
   - The data components listed differ depending on the ODS version installed on the CIC server.
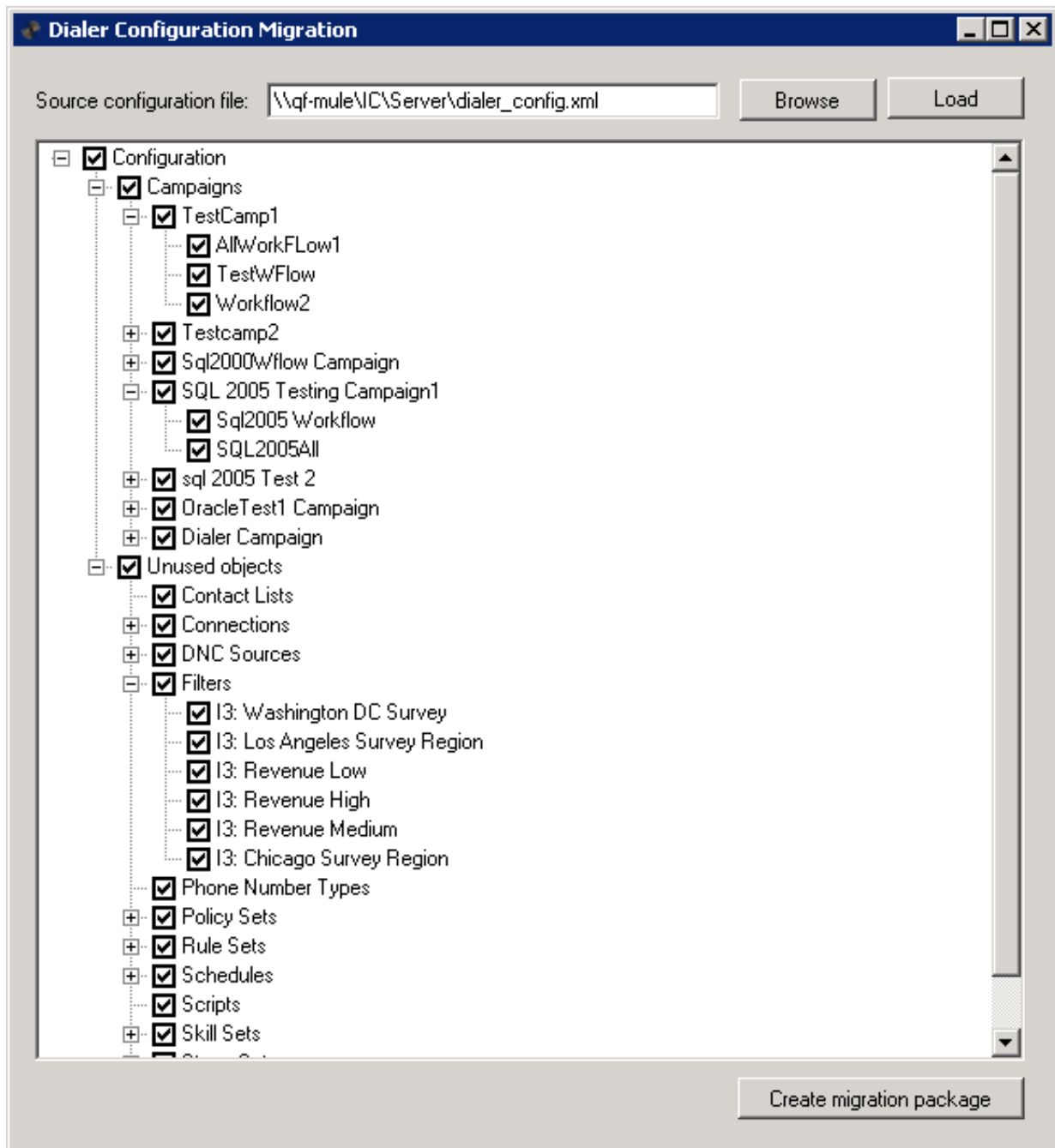
10. (**Interaction Dialer only**) Click **Create migration package** to add the selected Dialer data components to the CIC configuration file. Click **OK** when the following message appears:
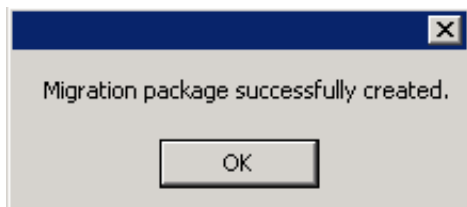
The Interaction Migrator **Export Status** page displays again. When the export process is complete, the **Export Status** page displays the name and location of the CIC configuration data file, and how long the process took.

11. Click **Next** to continue.
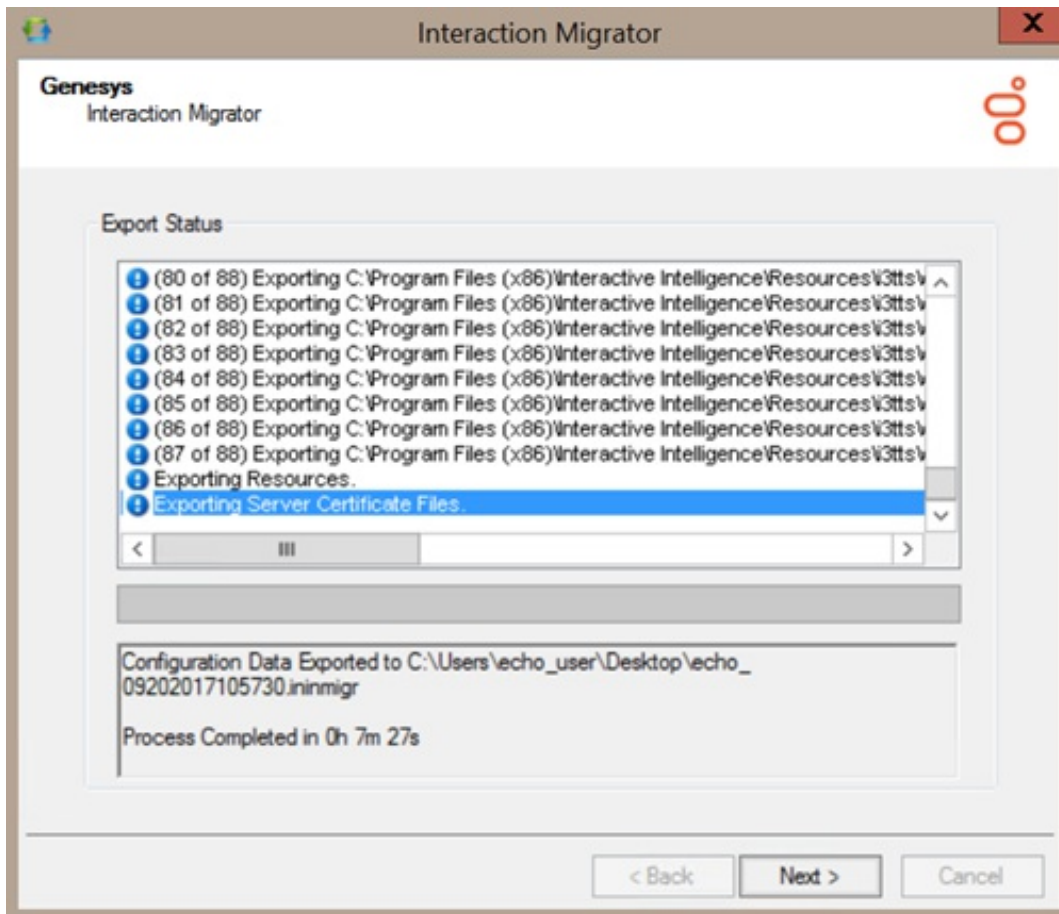
The CIC configuration data file name is unique. It consists of the server name combined with a date/time stamp: *ServerName_ DateTimeStamp*.ininmigr. If the migration doesn't complete successfully, multiple export files are created instead of the single .ininmigr file.

Interaction Dialer: The CIC configuration data file includes the Interaction Dialer configuration data.

12. Click **Finish** to close Interaction Migrator.
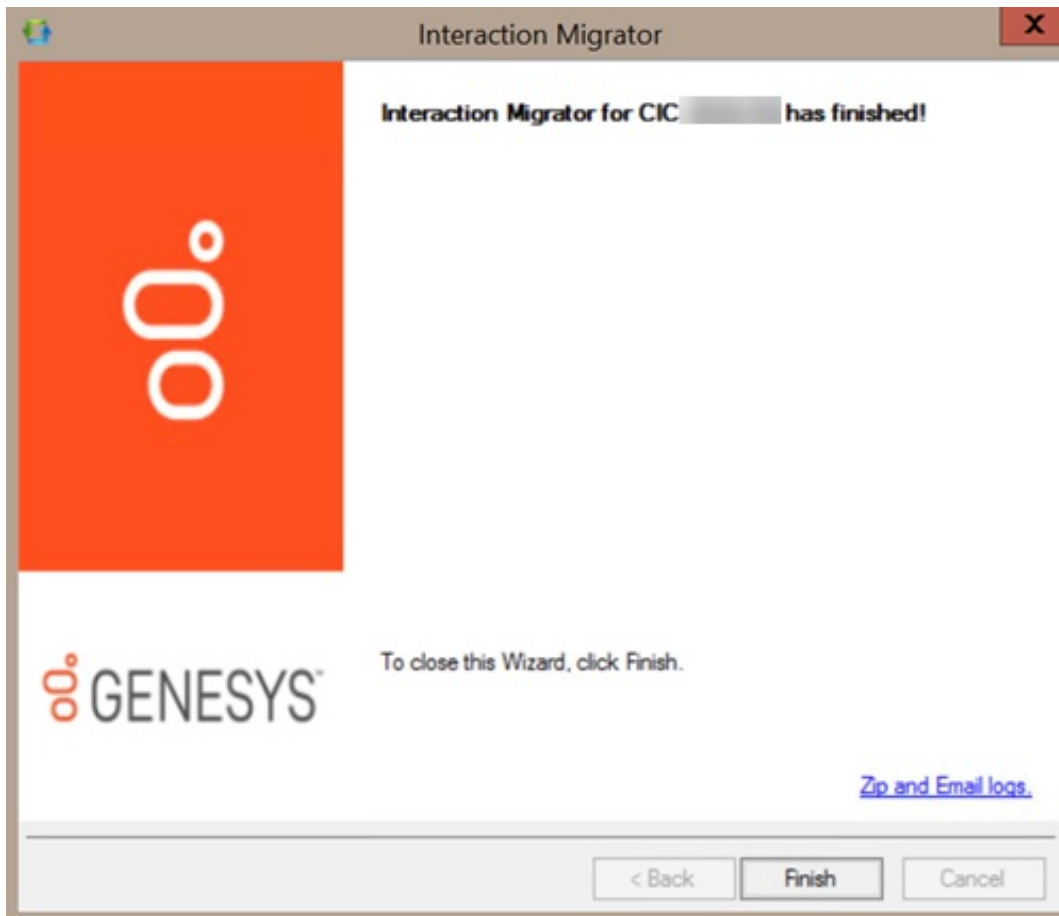
Note: If you encountered issues during the export process, click **Zip and Email logs** to open Outlook and send a copy of the trace logs to PureConnect Customer Care.

13. If you stopped CIC Service, restart it.
14. To prepare for the import procedure, **locate the resulting CIC configuration data file** (*ServerName_DateTimeStamp*.ininmigr) on the CIC 2.4/3.0 server and **copy the file to a USB key or other writeable storage location**.

   Genesys recommends this method of copying the CIC configuration data file to the installation media to make it easier to copy the file to the CIC 4.0 servers.

Prepare the CIC Server Environment

This section describes the procedures for preparing the CIC server environment for the migration.

CIC 2015 R1 or later server hardware requirements for CIC

For minimum and recommended hardware requirements for the CIC 2015 R1 or later server, see *CIC Server* in the *PureConnect Installation and Configuration Guide* in the PureConnect Documentation Library.

For information about deploying the CIC server on a virtual platform, see the *CIC Virtualization Technical Reference* in the PureConnect Documentation Library.

PureConnect 2018 R4 or later server software requirements for CIC

Ensure that you fulfilled the CIC server software requirements, including pre- and post-Windows OS installation, described in "CIC Server" in the *PureConnect Installation and Configuration Guide* in the PureConnect Documentation Library. Following is a summary of the PureConnect 2018 R4 or later server software requirements.

Microsoft Windows OS
- Microsoft Windows Server 2016 (64-bit)
- Microsoft Windows Server 2012 R2 (64-bit)

Microsoft .NET Framework
- Microsoft .NET Framework 4.7 or later
- Microsoft .NET Framework 3.5.1

CIC 2015 R1 through 2018 R3 server software requirements for CIC

Ensure that you fulfilled the CIC server software requirements, including pre- and post-Windows OS installation, described in "CIC Server" in *PureConnect Installation and Configuration Guide* in the PureConnect Documentation Library. Following is a summary of the CIC 2015 R1 through 2018 R3 server software requirements.

Microsoft Windows OS
- Microsoft Windows Server 2012 R2 (64-bit)
- Microsoft Windows Server 2008 R2 SP1 (64-bit)

Microsoft .NET Framework
- Microsoft .NET Framework 4.5.2 or later
- Microsoft .NET Framework 3.5.1

Database server requirements CIC 2015 R1 or later

Before beginning the CIC 2015 R1 or later server installation, ensure that you fulfilled the requirements for the 2015 R1 or later database server. You create the CIC 2015 R1 or later database as part of the CIC 2015 R1 or later server installation. For more information about the requirements, see *Database Server* in the *PureConnect Installation and Configuration Guide*.

CIC 2015 R1 or later supports the following database platforms:
- Microsoft SQL Server 2016 (on Windows Server 2012 R2)
- Microsoft SQL Server 2014 (on Windows Server 2012 R2)
- Microsoft SQL Server 2012 (on Windows Server 2012 R2)
- Microsoft SQL Server 2008 R2 SP 1 and SP 2 (32- and 64-bit)
- Oracle 11g R2 (32- and 64-bit) 11.2.0.1.0 database with 11.2.0.1.0 client

> **Note:** For known issues with Oracle client 11.2.0.1.0, see KB article: https://my.inin.com/products/pages/kb-details.aspx?entryid=q139584425402029.

- Oracle 11g R2 (64-bit) 11.2.04.0 database with 11.2.0.4.0 client
- Oracle 11g R2 (64-bit) 11.2.0.3.0 database with 11.2.0.3.0 client

> **Important!**
> There are known issues with the CIC Database Migration Assistant and the Oracle 11.2.0.3.0 client. Genesys recommends using one of the earlier Oracle versions on the CIC Database Migration Assistant client computer.

- Oracle 11g R2 (64-bit) 11.2.0.2.0 database with 11.2.0.2.0 client
- Oracle 11g R2 (32- and 64-bit) 11.2.0.1.0 database with 11.2.0.1.0 client

> **Note:** For known issues with Oracle client 11.2.0.1.0, see KB article: https://my.inin.com/products/pages/kb-details.aspx?entryid=q139584425402029.

32-bit versions of SQL Server and Oracle supported but not recommended

The migration supports 32-bit versions of Microsoft SQL Server and Oracle, but Genesys doesn't recommend them because of limited memory availability. Use the 32-bit version as a temporary step toward the 64-bit version.

SQL Server 2000 SP4 to SQL Server 2012 upgrades not supported

Due to a driver incompatibility with Microsoft SQL Server Native Client 11.0, upgrades from SQL Server 2000 SP4 to SQL Server 2012 are not successful. Customers who wish to upgrade from SQL Server 2000 to SQL Server 2012 must follow one of these workarounds:
- Upgrade from SQL Server 2000 to SQL Server 2005/2008, and then create a backup of the database and restore it to the SQL Server 2012 instance.
- Upgrade from SQL Server 2000 to SQL Server 2005/2008, and then detach the database and reattach it to the SQL Server 2012 instance.

CIC 2015 R1 or later server installation

For the purposes of the migration, the CIC 2015 R1 or later server installation:
- Installs a new CIC 2015 R1 or later server with default settings and configurations. Later, you migrate the CIC 2.4/30 settings and configurations to the CIC 2015 R1 or later server using Interaction Migrator, as described in Import CIC 2.4/3.0 Configuration Data.
- Creates a CIC 2015 R1 or later database. Later, you migrate the CIC 3.0 data to the CIC 2015 R1 or later database using CIC Database Migration Assistant, as described in Migrate the CIC 3.0 Database.
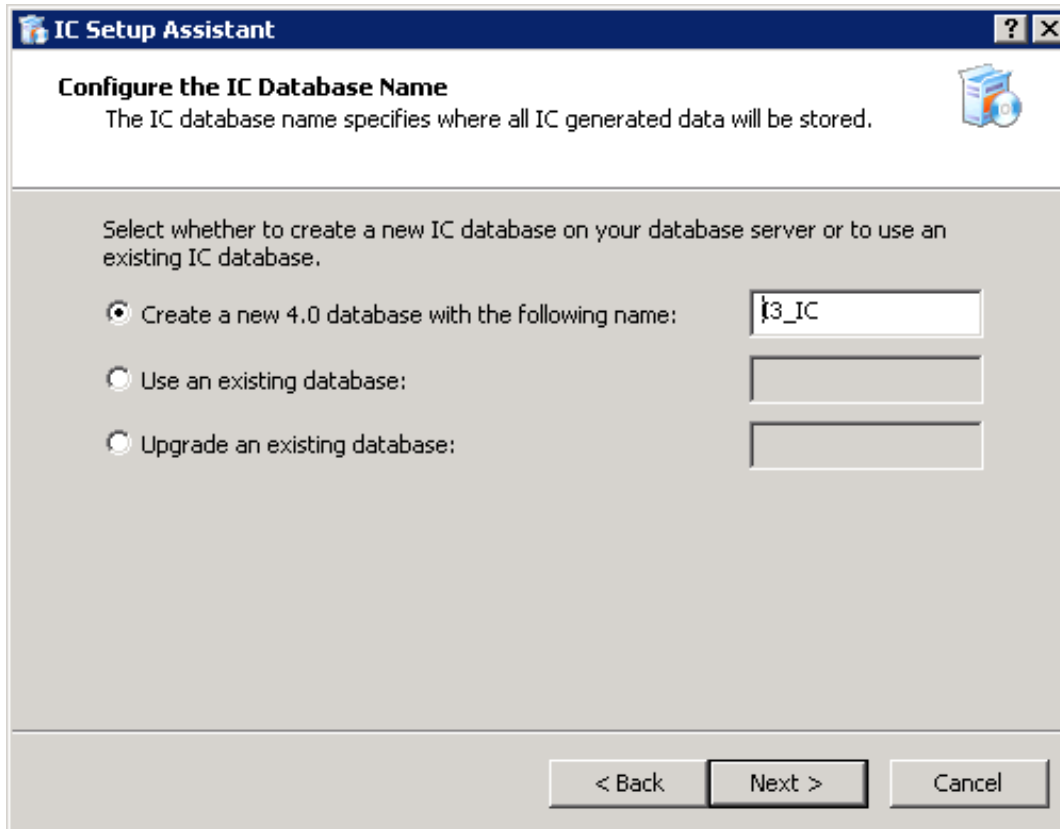
To install the CIC 2015 R1 or later server and create the CIC 2015 R1 or later database, follow the instructions in "CIC Server Installation" and "CIC Setup Assistant" in the *PureConnect Installation and Configuration Guide*.

Make recommended selections in CIC Setup Assistant for migrations

Select the following in CIC Setup Assistant for migrations:
- Choose the default settings as often as possible.
- Do not create dial plan, stations, users, workgroups, roles, or auto-attendant menu.
- On the **Database Configuration**-related pages, provide the appropriate information for your CIC 2015 R1 or later database server.
- On the **Configure the CIC Database Name** pages, click **Create a new CIC database**.

> **Note:** Do *not* select the **Upgrade an existing database** option.

- On the **CIC Setup Assistant Completed** page, accept the default setting of **Yes, I want to restart my computer now.**

Change site ID on CIC 2.4/3.0 servers

If you are consolidating multiple CIC 2.4/3.0 servers that have identical site IDs, change the site ID for each of those servers to make them unique before importing configuration data.

Following the completion of CIC Setup Assistant, complete the following procedure for each CIC 2.4/3.0 server that you plan to consolidate.

To change the site ID on a CIC 2.4/3.0 server:

1. Contact PureConnect Customer Care to obtain a script that allows you to change the site ID of historical records. Run this script before continuing with the rest of this procedure.
2. On the CIC 2.4/3.0 server, start **CIC Service**.
3. After CIC Service starts, open **Interaction Administrator**.
4. In the **Collective** container, click **Home Site**.
5. In the right-side pane, double-click **Configuration**.
6. In the **Home Site Configuration** dialog box, in the **Site Identifier** box, type a unique site ID and then click **OK**.

7. In the **People** container, click **Users**.
8. In the right-side pane, double-click the user name associated to the domain user account used to run the CIC server installation.
9. In the **User Configuration** dialog box, if the **Extension**, **Password**, and **Mailbox User** aren't already configured, type the information in the boxes and then click **OK**.

Change site ID on the CIC 2015 R1 or later server

Before importing configuration data, set the site ID of the new CIC 2015 R1 or later server so that it is different from the site ID of the CIC 2.4/3.0 server. Interaction Migrator does not allow you to import users whose site ID matches the site ID of the CIC 2015 R1 or later server.

To change the site ID on the CIC 2015 R1 or later server:

1. On the CIC 4.0 server, start **CIC Service**.
2. After CIC Service starts, open **Interaction Administrator**.
3. In the **Collective** container, click **Home Site**.
4. In the right-side pane, double-click **Configuration**.
5. In the **Home Site Configuration** dialog box, in the **Site Identifier** box, type a site ID that differs from the CIC 3.0 server site ID and then click **OK**.

Install Interaction Migrator

> **Important!**
> Ensure that you install the appropriate version of Interaction Migrator. For more information, see https://my.inin.com/products/cic/Pages/Migrations.aspx)

To install Interaction Migrator:

1. Ensure that you installed the appropriate Microsoft .NET Framework version on the CIC server or Interaction Media Server. Otherwise, the Interaction Migrator install asks you to install it.
2. Open the **CIC 2.4/3.0 to CIC 2015 R1 or Later Migrations** page at https://my.inin.com/products/cic/Pages/Migrations.aspx.
3. Review any notes on this page.

> **Important!**
> Ensure that you install the appropriate version of Interaction Migrator.

4. Download and copy the Migration `.iso` to a file server as described on the **CIC 2.4/3.0 to CIC 2015 R1 or Later Migrations** page at https://my.inin.com/products/cic/Pages/Migrations.aspx.

5. Locate the Interaction Migrator install `.msi` file, for example, `Migrator_2015_R2.msi`, on the Migration `.iso` and double-click it.
6. On the **Welcome** page, click **Next**.
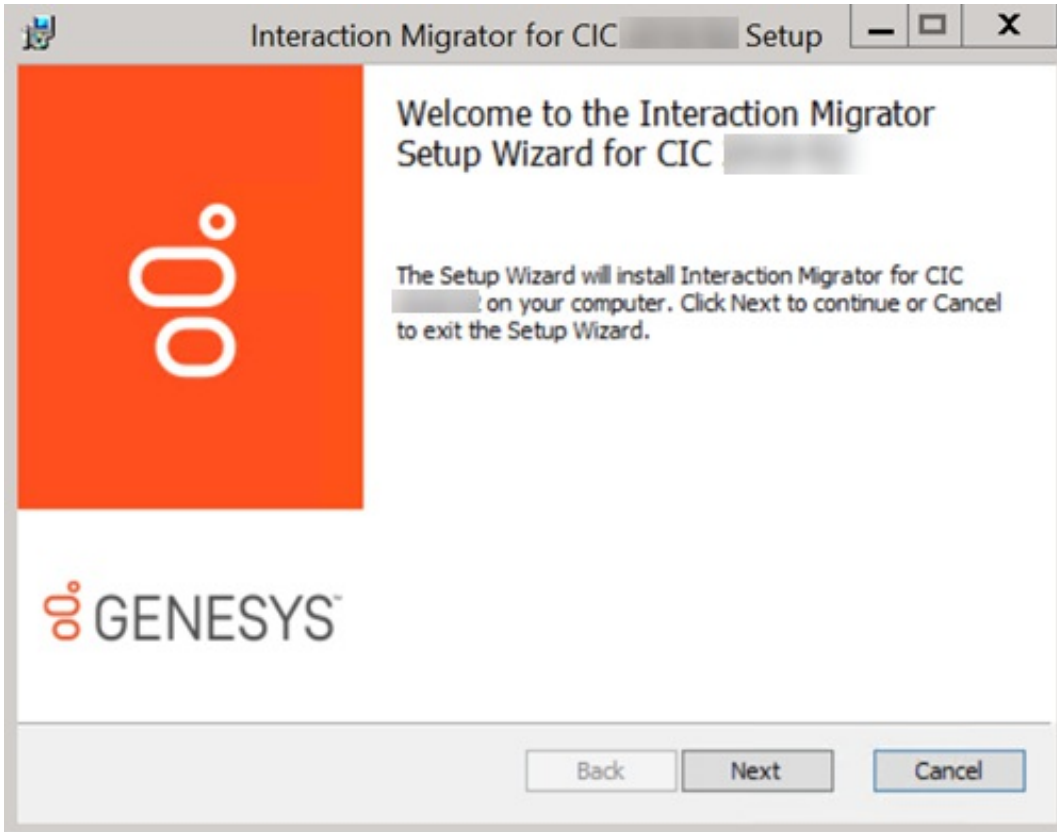
7. On the **Custom Setup** page, click **Next**. Genesys recommends that you keep the default location.
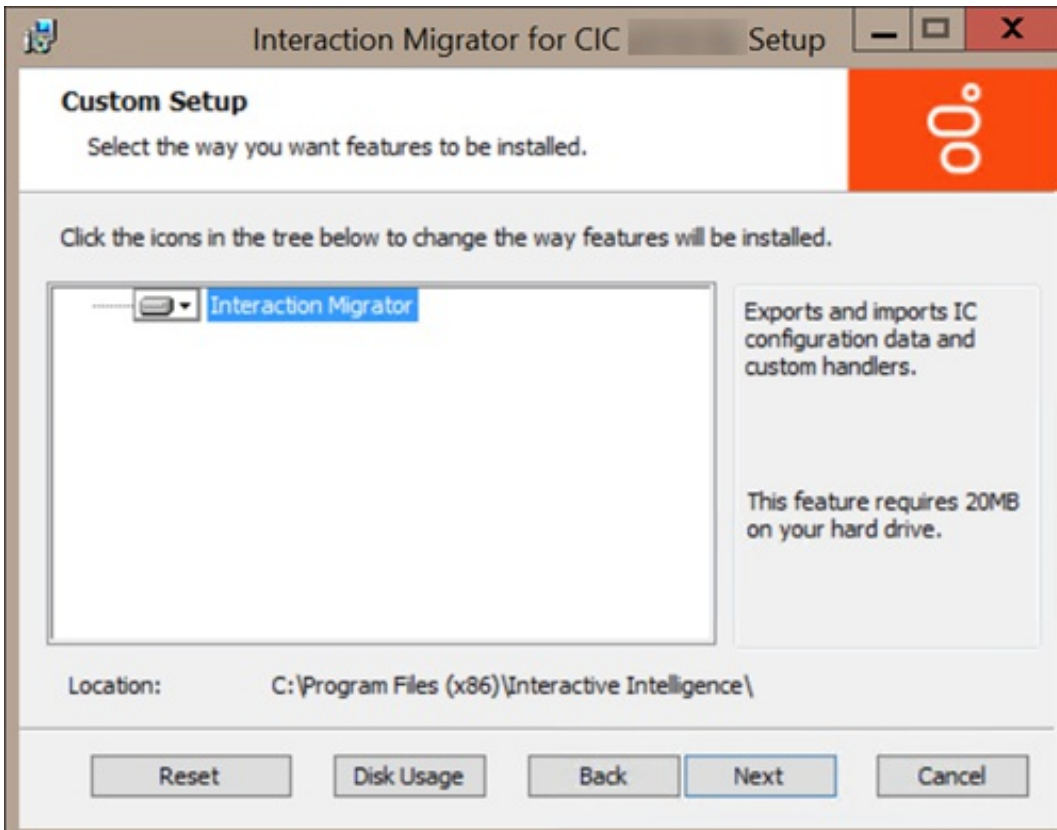
8. On the **Ready to Install Interaction Migrator** page, click **Install**.
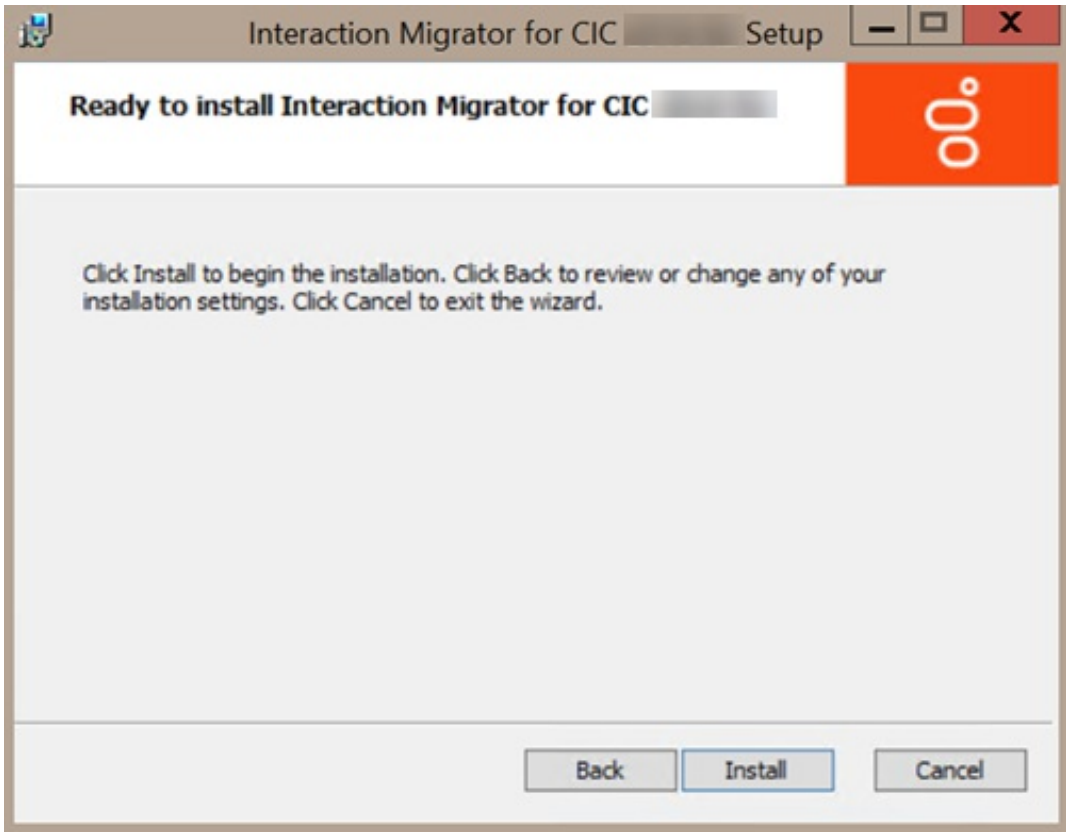
9. When the installation is complete, click **Finish**.
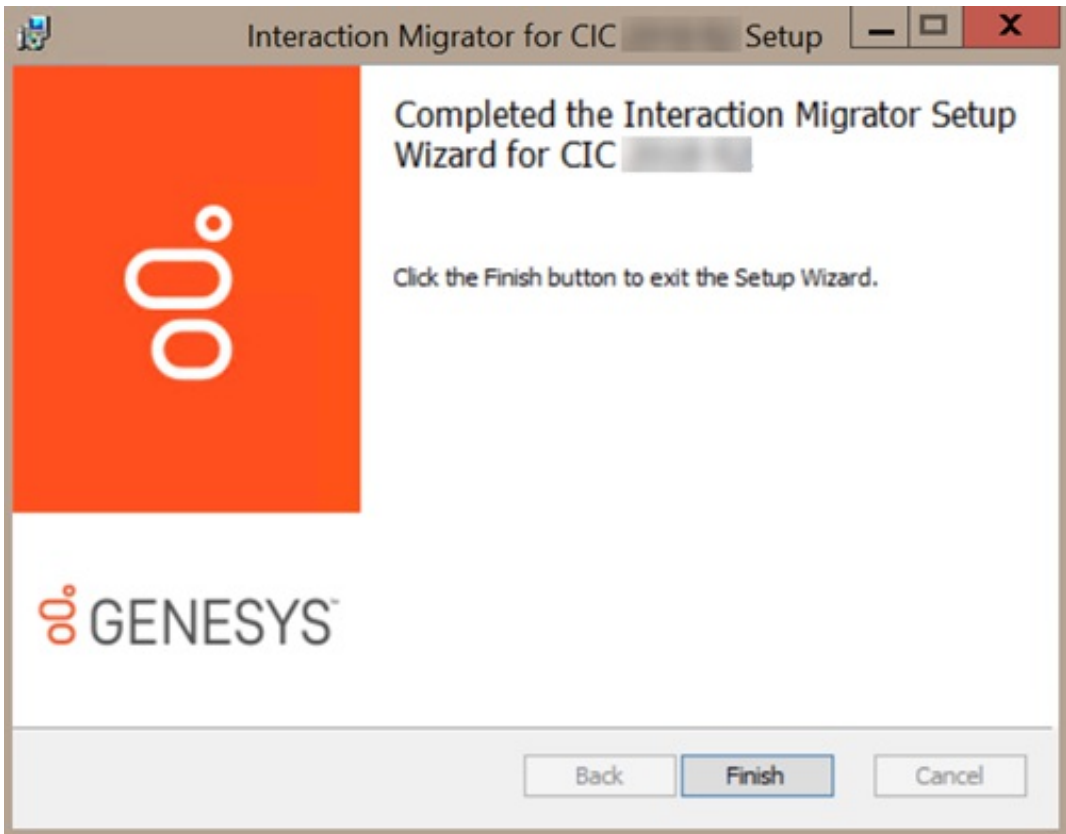
The install places the Interaction Migrator run file in the `\I3\CIC\Migrator` folder. The install also places an Interaction Migrator link on the desktop and under **Start->Programs->PureConnect->Interaction Migrator**.

Prepare the Interaction Dialer 2015 R1 or Later Server Environment

This section is for Interaction Dialer sites only. It describes the procedures for preparing the Interaction Dialer 2015 R1 or later CIC and ODS server environment for the migration.

CIC 2015 R1 or later server hardware requirements for Dialer

For minimum and recommended hardware requirements for the CIC 2015 R1 or later server, see "CIC Hardware and Software Requirements" in the *Interaction Dialer Installation and Configuration Guide* in the PureConnect Documentation Library.

CIC 2015 R1 or later server software requirements for Dialer

Ensure that you fulfilled the CIC server software requirements described in "CIC Hardware and Software Requirements" in the *Interaction Dialer Installation and Configuration Guide* in the PureConnect Documentation Library.

Database server requirements

In most cases, the database server (Microsoft SQL Server or Oracle) can be installed on the CIC server. Interaction Dialer 2015 R1 or later supports the same databases and database versions as CIC 2015 R1 or later.

The only exception is for an Oracle 11g R2 (64-bit) database. In this case, the database server must be installed on a separate server from the CIC server, and an Oracle (32-bit) client must be installed on the CIC server.

Additional database server requirements for Interaction Dialer

This section discusses additional database server requirements for Interaction Dialer 2015 R1 or later for Microsoft SQL Server and Oracle.

For complete instructions, see the *CIC Hardware and Software Requirements* in the *Interaction Dialer Installation and Configuration Guide* in the PureConnect Documentation Library.

Microsoft SQL Server 2008 R2 Command Line Utilities (x64)

If your database server is a **Microsoft SQL Server**, you must also ensure the **Microsoft SQL Server 2008 R2 Command Line Utilities (x64)** is installed on the CIC server, even if the DBMS is installed on a separate computer from the CIC server.

The **Microsoft SQL Server 2008 R2 Command Line Utilities (x64)** includes a BCP utility that bulk copies data between an instance of Microsoft SQL Server 2008 R2 and a data file in user-specified format. This utility can import large numbers of new rows into SQL Server tables, or to export data from tables into data files.

> **Important!**
> If the **Microsoft SQL Server 2008 R2 Command Line Utilities (x64)**, and therefore the **BCP utility**, is not present, Dialer cannot import or export data from a contact list. The administrator must ensure this utility is present to ensure contact lists are usable.

Oracle Database Utilities

Oracle Database Utilities, included with the Oracle Client install, is required for Interaction Dialer 2015 R1 or later using an Oracle database:

- On the ODS server if you plan to run reports
- On the CIC server for the UDL file to obtain the Oracle connections

Download the Oracle client appropriate for the Oracle version you plan use from
http://www.oracle.com/technetwork/database/enterprise-edition/downloads/index.html.

Install the CIC 2015 R1 or later server

To install the CIC 2015 R1 or later server, see "Central Campaign Server Install" in the *Interaction Dialer Installation and Configuration Guide* in the PureConnect Documentation Library.

Create a UDL file for the new 2015 R1 or later database

A database connection file (`.UDL`) is required to ensure Interaction Dialer works cooperatively with your company's database system if the CIC database contains a contact list. The UDL file resides on the Central Campaign Server (CCS).

Create a UDL file using Microsoft's Data Link Properties utility to define an OLE DB data source that connects a database server with applications. Create the UDL file before adding a Dialer database connection. If needed, create a user with the appropriate permissions as the CIC administrator account may not have the appropriate permissions.

For complete instructions, see "Create a UDL File" in *Interaction Dialer Installation and Configuration Guide* in the PureConnect Documentation Library.

ODS 2015 R1 or later server software requirements

Before you begin the ODS 2015 R1 or later server installation, ensure that you installed the CIC 2015 R1 or later server as described in Prepare the CIC 2015 R1 or later Server Environment.

Here is a summary of the ODS 2015 R1 or later server software requirements:

- CIC 2015 R1 or later
- Interaction Dialer 2015 R1 or later

For complete instructions on completing ODS 2015 R1 or later server software requirements, see "ODS hardware and software requirements" in the *Interaction Dialer Installation and Configuration Guide* in the PureConnect Documentation Library.

Install the ODS 2015 R1 or later server

To install the ODS 2015 R1 or later server, see "Outbound Dialer Server Install" in *Interaction Dialer Installation and Configuration Guide* in PureConnect Documentation Library.

Multiple CIC/ODS servers (CIC 2015 R1 or later)

The current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package supports only one-to-one ODS server migrations. Multiple CIC/ODS server environments must create a 2015 R1 or later CIC/ODS server for each existing 2.4/3.0 CIC/ODS server. Follow the migration procedure instructions in this guide for each CIC/ODS server.

Multiple CIC/ODS servers (CIC 2015 R1 or later)

The current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package supports only one-to-one ODS server migrations. Multiple CIC/ODS server environments must create a 2015 R1 or later CIC/ODS server for each existing 2.4/3.0 CIC/ODS server. Follow the migration procedure instructions in this guide for each CIC/ODS server.

CIC Database Migration Assistant Installation

Genesys recommends installing the CIC Database Migration Assistant package on the CIC Database Migration Assistant client computer at this stage in the migration scenario because it places various pre-migration tools and scripts on the CIC Database Migration Assistant client computer.

About CIC Database Migration Assistant

About the CIC Database Migration Assistant package

The CIC Database Migration Assistant package consists of the following components:

- The **CIC Database Migration Assistant** utility moves data from a CIC 3.0 database to a CIC 2015 R1 or later database. It supports migrations from CIC 3.0 to CIC 2015 R1 or later only.

  > **Note:** If you are migrating from CIC 2.4, upgrade to a CIC 3.0 database first as described in <u>Prepare for CIC Database Migration</u>.

- The **CIC Database Migration Assistant for Dialer** utility moves data from an Interaction Dialer 2.4 or 3.0 database to an Interaction Dialer 2015 R1 or later database.
- **Oracle and SQL Server scripts** for upgrading database schema manually before migrating the data.

Use with care: Genesys tested the CIC Database Migration Assistant extensively both internally and at customer beta sites. However, the complexities of customized systems can create unforeseen variables that this utility may not handle. Ensure that you backed up any system on which you plan to run this utility. Have a well-designed *and exercised* back out plan and a thorough test plan to verify all functions processed using this tool.

CIC Database Migration Assistant version information

The tools in the latest supported migration package support the latest CIC release and patch. The CIC Database Migration Assistant and Interaction Migrator installs indicate the CIC release version, for example, `DBMigrationAssistant_2015_R2.msi`. The CIC Database Migration Assistant and Interaction Migrator installs no longer contain the build version number in the install filename. However, once installed, the build version number is still available on the **Welcome** page in the lower right corner.

There may be instances when Genesys updates the CIC Database Migration Assistant between CIC releases to support database schema changes in the latest patch. If so, Genesys posts a new migration package on the **Downloads** page at <u>https://my.inin.com/products/Pages/Downloads.aspx</u> and updates the **Release Posted on** date.

Tracing (CIC Database Migration Assistant)

CIC Database Migration Assistant uses the same tracing functionality as CIC 2015 R1 or later. The CIC Database Migration Assistant install includes the trace configuration and log viewer utilities. The default output directory for the trace logs is the inin_tracing folder under the user's temp directory (`%temp%\inin_tracing`). Tracing is always on by default and logs generate only when CIC Database Migration Assistant is running.

> **Note:** If drive space is a concern on the server, turn tracing down to status level for Interaction Migration topics.

CIC Database Migration Assistant client computer

You can install CIC Database Migration Assistant on most any computer; however, do **NOT** install CIC Database Migration Assistant on the CIC server.

Fulfil Microsoft .NET Framework requirements for client computer

CIC Database Migration Assistant is built on the Microsoft .NET Framework. Ensure that you have the correct versions installed on the CIC Database Migration Assistant client computer before installing CIC Database Migration Assistant.

- **PureConnect 2018 R4 or later** requires Microsoft .NET Framework 4.7 or later and Microsoft .NET Framework 3.5.1.
- **CIC 2015 R1 through 2018 R3** requires Microsoft .NET Framework 4.5.2 or later and Microsoft .NET Framework 3.5.1.

For more information about requirements, see https://help.genesys.com/cic/desktop/software_requirements.htm.

Oracle client requirements

There are known issues with the CIC Database Migration Assistant and the Oracle 11.2.0.3.0 and 11.2.0.4.0 clients. The database migration requires the Oracle 11.2.0.2.0 client on the CIC Database Migration Assistant client computer. If CIC Database Migration Assistant does not run on the database server computer, you can use Oracle 11.2.0.3.0 and 11.2.0.4.0 clients on the database server computer. For this reason, Genesys recommends installing CIC Database Migration Assistant on a separate computer from the computer used for the 4.0 CIC database.

Install CIC Database Migration Assistant

1. Ensure that you installed the appropriate Microsoft .NET Framework versions on the CIC Database Migration Assistant client computer.
2. Open the **CIC 2.4/3.0 to CIC 2015 R1 or Later Migrations** page at https://my.inin.com/products/cic/Pages/Migrations.aspx.
3. Review any notes on this page.
4. Locate the CIC Database Migration Assistant `.msi` file, for example, `DBMigrationAssistant_2015_R2.msi`, on the Migration `.iso` and double-click it.
5. On the **Welcome** page, click **Next**.
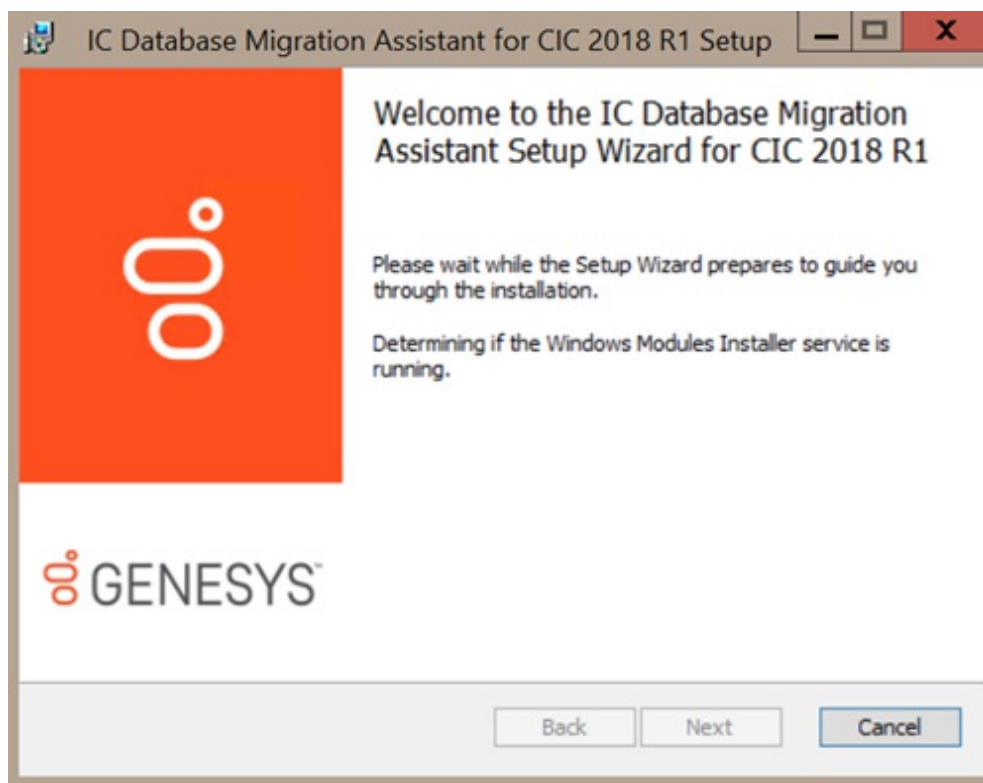
6. On the **Ready to Install CIC Database Migration Assistant** page, click **Install**.
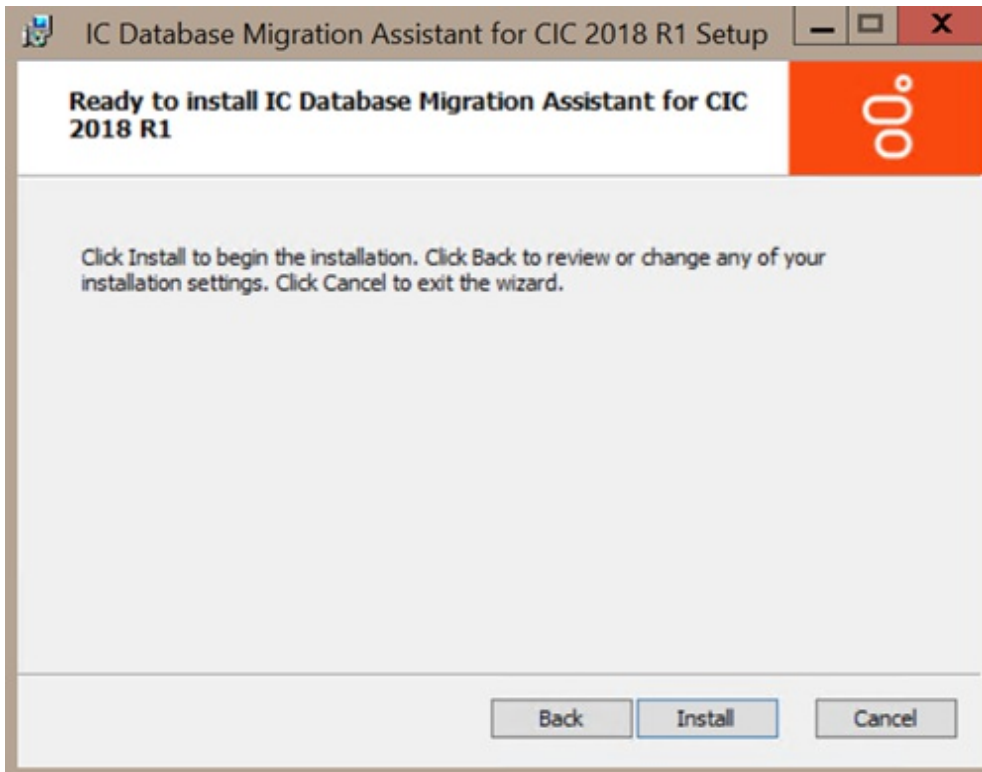
The **Installing CIC Database Migration Assistant** page displays the status of the install process.
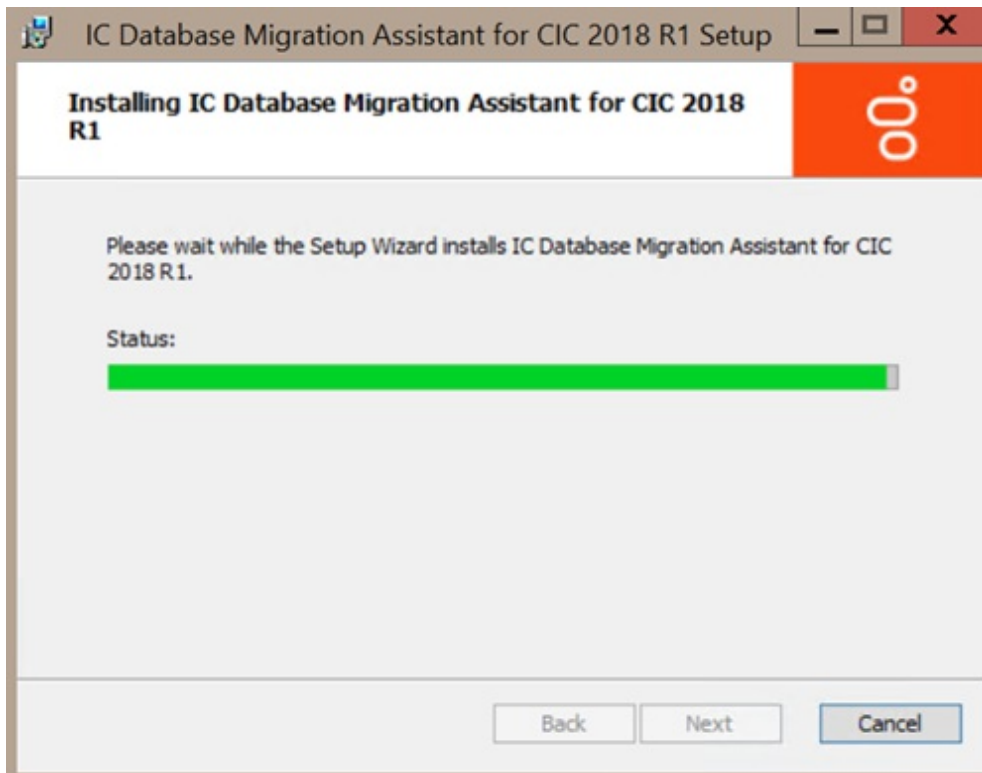
7. When the installation is complete, click **Finish**.
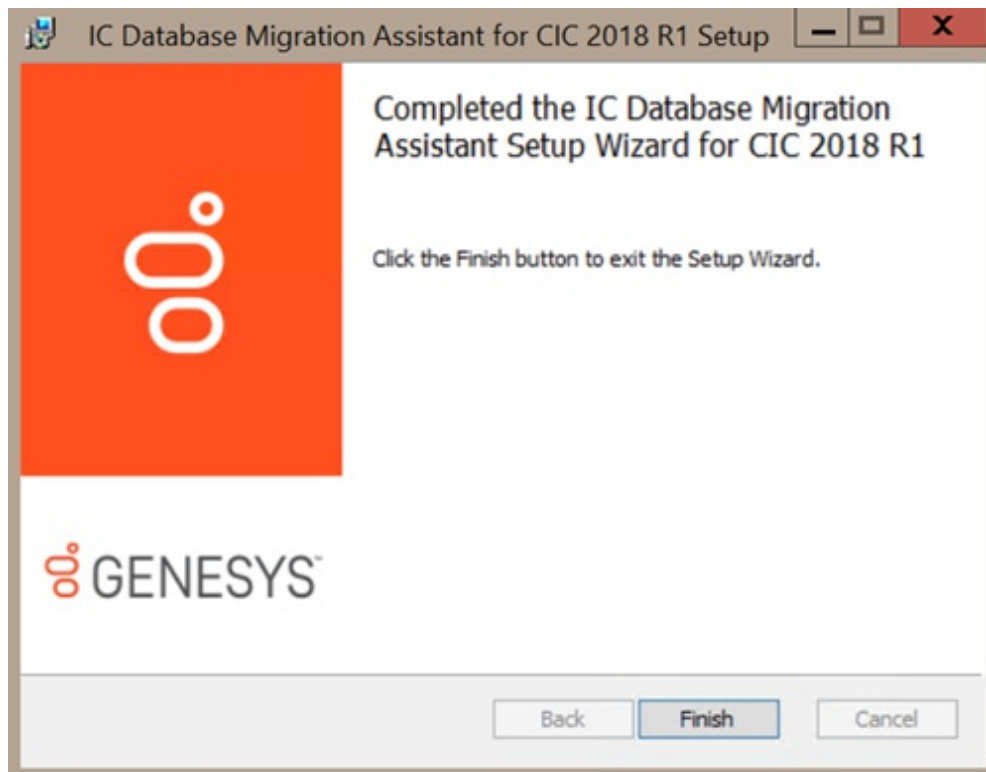
The CIC Database Migration Assistant install creates a `C:\Program Files (x86)\Interactive Intelligence\CIC Database Migration Assistant` folder containing the CIC Database Migration Assistant. The folder also contains CIC Database Migration Assistant for Dialer executables and the other pre-migration tools and scripts included in the CIC Database Migration Assistant package.

The CIC Database Migration Assistant install places the following shortcuts on the desktop:

CIC Database Migration Assistant

CIC Database Migration Assistant for Dialer

Prepare for CIC Database Migration

This section describes the procedures to complete before migrating a CIC 3.0 database to a CIC 2015 R1 or later database using CIC Database Migration Assistant. At this point in the migration process, you should have already set up the CIC 2015 R1 or later server, created a CIC 2015 R1 or later database as part of the CIC 2015 R1 or later server installation, created a client computer for the migration, and installed CIC Database Migration Assistant on the CIC Database Migration Assistant client computer.

> **Notes:**
> - The current version of CIC Database Migration Assistant contains updated Oracle tools and scripts for CIC 2015 R1 and later.
> - If your implementation includes Interaction Dialer, prepare for and migrate the CIC database first as described in Prepare for CIC Database Migration and CIC 3.0 Database Migration before preparing for and migrating the Interaction Dialer database.

Prepare the CIC Database Migration Assistant client computer

This section describes how to prepare the CIC Database Migration Assistant client computer by installing the appropriate database server client.

Install Microsoft SQL Server 2008 Management Studio

If you are migrating a SQL Server database, the migration requires SQL Server client to run CIC Database Migration Assistant on the CIC Database Migration Assistant client computer.

Microsoft SQL Server 2008 Management Studio includes the SQL Server client. To install Microsoft SQL Server 2008 Management Studio, do one of the following:
- Use the SQL Server 2008 R2 install media (disc/ISO/unpacked files on hard drive) to install the *standard* SQL Server 2008 Management Studio (SSMS).
- Download and install the SQL Server 2008 R2 Management Studio Express (SSMSE) from: http://www.microsoft.com/en-us/download/details.aspx?id=22985.

Install Oracle Administrator Client

If you are migrating an Oracle database, the migration requires Oracle Administrator Client with SQL Plus to run CIC Database Migration Assistant on the CIC Database Migration Assistant client computer.

> **Note:** If the Oracle server is the CIC Database Migration Assistant client computer, it is not necessary to install the Oracle Administrative Client software.

Download the Oracle client appropriate for the Oracle version you plan to use from http://www.oracle.com/technetwork/database/enterprise-edition/downloads/index.html.

> **Note:** In the **Select Installation Type** dialog box, ensure that you select **Administrator** as the installation type.

SQL Plus relies on the `ORACLE_HOME` environment variable. If the `ORACLE_HOME` environment variable isn't set, set it to point to the directory where you installed the Oracle software.

Upgrade the 2.4 or 3.0 database schema

Changes to database schema in CIC 4.0 SU 3 and later

Genesys enhanced the CIC 2015 R1 or later database schema in Service Update 3 (and later) to add key constraints in all tables. These new constraints ensure the highest level of data integrity possible. To migrate CIC 3.0 data into a CIC 4.0 SU 3 or later database, resolve any inconsistencies in the source data first.

Genesys updated the tools and scripts that comprise the CIC Database Migration Assistant to include duplicate/null cleanup scripts and processes. When run, they address any issues that might exist in the CIC 3.0 source data, helping to ensure a successful migration to the database schema in CIC 4.0 SU 3 and later.

Upgrade the CIC 2.4 or 3.0 database schema to the most recent CIC 3.0 database schema (SQL Server)

Manually run the database schema upgrade scripts (SQL Server)

For SQL Server customers, run the scripts from within SQL Server 2008 Management Studio.

Upgrade the CIC 2.4/3.0 database schema to the most recent CIC 3.0 database schema (SQL Server)

The 3.0 SQL Server scripts are in the `CIC Database Migration Assistant\Scripts\sqlserver\source` directory, but you must run them from within SQL Server 2008 Management Studio.

Run the scripts in the following order, one after another. **Don't** run them at the same time.

1. `ICUpgrade.sql`
2. `TrackerUpgrade.sql`
3. `TrackerBuild.sql`
4. `IRBuild.sql`
5. `OptimizerBuild.sql`
6. `CSSurveyBuild.sql`
7. `WorkflowBuild.sql`

> **Note:** The `WorkflowBuild.sql` script only runs on SQL Server 2005 or later.

8. `IWPBuild.sql`

Complete duplicate/null clean up procedures on the CIC 2.4/CIC 3.0 database (SQL Server)

To address any issues that might exist in the CIC 3.0 source data before migrating to the new CIC 4.0 SU3 and above schema, Genesys created a new set of duplicate/null cleanup scripts. Running these scripts creates stored procedures capable of finding and fixing records that can cause the migration to fail.

The 3.0 SQL Server cleanup scripts are in the `CIC Database Migration Assistant\Scripts\sqlserver\source\dupcheck` directory, but you must run them from within SQL Server 2008 Management Studio.

Run the scripts in the following order, one after another. **Don't** run them at the same time.

1. `Delete_Dups_AgentActivityLog.sql`
2. `Delete_Dups_AgentQueueActivationHist.sql`
3. `Delete_Dups_IAChangeLog.sql`
4. `Delete_Dups_ICDirChangeLog.sql`
5. `Delete_Dups_ILineGroupStats.sql`
6. `Delete_Dups_ILineStats.sql`
7. `Delete_Dups_IPA_Flow_Notes.sql`

> **Note:** The `Delete_Dups_IPA_Flow_Notes.sql` script only runs on SQL Server 2005 or later.

8. `Delete_Nulls_IVRInterval.sql`
9. `Delete_Dups_LineConfig.sql`
10. `Delete_Dups_LineGroupConfig.sql`
11. `Delete_Dups_CallDetail.sql`
12. `Delete_Dups_LineGroupLines.sql`
13. `Delete_Dups_SurveyConfigLog.sql`
14. `Delete_Dups_SurveyDetail.sql`
15. `Delete_Nulls_SurveyObjectToSurveyPrompt.sql`
16. `Delete_Dups_SurveyObjectToSurveyPrompt.sql`
17. `Delete_Nulls_SurveyUserObjectSecurity.sql`
18. `Delete_Nulls_SurveyWork.sql`
19. `Delete_Dups_UserWorkGroups.sql`

Each script runs some quick checks and if needed, creates a corresponding stored procedure to complete the rest of the examination and cleanup. The stored procedure has the same name as the script that created it.

The next step is to run each stored procedure against the database in the default *audit only* mode. This mode creates a result table and places records into it, but only copies the records there and doesn't change the data in the source table.

Run each of the stores procedures in the same order as the scripts that created them by running the following SQL for each stored procedure. This example is for the first script in the list, against a database named `IC30DB`.

```
Use [IC30DB];
EXEC [dbo].Delete_Dups_AgentActivityLog;
```

The script returns a result indicating whether it found any duplicate rows.

```
--------------------------------------
Executing sproc Delete_Dups_AgentActivityLog
Rows inserted into dbo.AgentActivityLog_d1305100353 = 7
--------------------------------------
```

For the previous example, the stored procedure found seven duplicate records and copied them to an audit table. The name of the table is in the format of the source table name, an underscore, a letter `d` or `n` indicating whether it was the duplicate or null version of the stored procedure, and then a number comprised of the two digit year, two digit month, two digit day, two digit hour, and two digit minute. This way, the audit can run as many times as you like and always produce a new table. You can optionally examine this data. If you have concerns regarding its removal, contact PureConnect Customer Care Services to work with them regarding those records.

> **Important!**
> Make a list of each stored procedure that finds records. Once all the stored procedures are run, use that list to complete the steps outlined in KB article:
> https://my.inin.com/Products/Pages/KB-Details.aspx?EntryID=Q136562774400885
> **If you do not complete these steps, the migration of the data to the CIC 2015 R1 or later database fails.**

Upgrade the CIC 4.0 database schema to the most recent CIC 2015 R1 or later database schema (SQL Server)

The 2015 R1 or later SQL Server scripts are in the `CIC Database Migration Assistant\Scripts\sqlserver\target` directory, but you must run them from within SQL Server 2008 Management Studio.

Run the scripts in the following order, one after another. **Don't** run them at the same time.

1. `ICBuild.sql`
2. `TrackerBuild.sql`
3. `IRBuild.sql`
4. `OptimizerBuild.sql`
5. `CSSurveyBuild.sql`
6. `WorkflowBuild.sql`

> **Note:** The `WorkflowBuild.sql` script only runs on SQL Server 2005 or later.

7. `DialerBuild.sql`
8. `IWPBuild.sql`
9. `SetUpMigratorUser.sql`

Upgrade the CIC 2.4/3.0 and CIC 2015 R1 or later database schema (Oracle)

CIC Database Migration Assistant relies on a specific database schema to be in place on both the source and destination databases. Before you run CIC Database Migration Assistant, you must:
- Upgrade the source CIC 2.4/3.0 database schema to the most recent (tested) CIC 3.0 database schema.
- Upgrade the destination CIC 4.0 database schema to the most recent (tested) CIC 2015 R1 or later 0 database schema.

To upgrade the schemas, run a set of scripts placed on the CIC Database Migration client computer when you installed CIC Database Migration Assistant. Running these scripts ensures that each database matches the schema required for the latest version of CIC Database Migration Assistant.

There are two options for running the database schema upgrade scripts:
- Follow prompts in CIC Database Migration Assistant to upgrade the database.
- Manually run the database schema upgrade scripts before running CIC Database Migration Assistant.

Run the database schema upgrade scripts (Oracle) manually

Oracle customers use the following syntax from the command line:

```
sqlplus <dba user>/<dba pw>@<service name> @ScriptName.sql
<CIC DATA Tablespace> <CIC Index Tablespace>
```

Upgrade the CIC 2.4/3.0 database schema to the most recent CIC 3.0 database schema (Oracle)

The 3.0 Oracle Server scripts are in the `CIC Database Migration Assistant\Scripts\oracle\source` directory.

Run the scripts in the following order, one after another. **Don't** run them at the same time. Use the syntax and special directions provided for each script.

1. `Create_DB_Objects.sp`

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Create_DB_Objects.sp`

2. `Ora_UpgradeDBSchema.sql`

   > **Note:** You must have system permissions for the Ora_UpgradeDBSchema.sql script.

   Before you run this script, open the command prompt, change the directory to the location of the `UpgradeDBSchema` script, and run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_UpgradeDBSchema.sql <Data_Tablespace> <Index_Tablespace> <Schema_Owner> <Schema_OwnerPass> <Hostname:Port/Service>`

3. `Ora_TrackerUpgrade.sql`

   > **Note:** You must have system permissions for the `Ora_TrackerUpgrade.sql` script.

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_TrackerUpgrade.sql <Data_Tablespace> <Index_Tablespace> <Schema_Owner> <Schema_OwnerPass> <Hostname:Port/Service>`

4. `Ora_TrackerBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_TrackerBuild.sql <Data_Tablespace> <Index_Tablespace>`

5. `Ora_IRBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_IRBuild.sql <Data_Tablespace> <Index_Tablespace>`

6. `Ora_OptimizerBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_OptimizerBuild.sql <Data_Tablespace> <Index_Tablespace>`

7. `Ora_CSSurveyBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_CSSurveyBuild.sql <Data_Tablespace> <Index_Tablespace>`

8. `Ora_WorkflowBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_WorkflowBuild.sql <Data_Tablespace> <Index_Tablespace>`

9. `Ora_IWPBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_IWPBuild.sql <Data_Tablespace> <Index_Tablespace>`

10. `Ora_ICFinalize.sql`

    > **Note:** You must have system permissions for the `Ora_ICFinalize.sql` script.

    Run this script from the SQL command-line using the following syntax:

    `sqlplus <User>/<Password>@<Hostname>:<Port>/<Service> @Ora_ICFinalize.sql <Schema_Owner>`

Complete duplicate/null clean up procedures on the CIC 2.4/CIC 3.0 database (Oracle)

The 3.0 Oracle cleanup scripts are in the `CIC Database Migration Assistant\Scripts\oracle\source\dupcheck` directory.

Run these scripts from the SQL command-line in the following order, one after another. **Don't** run them at the same time. Use the syntax and special directions provided for each script.

1. `Create_Sprocs.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Create_Sprocs.sql

2. `Execute_Sprocs.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Execute_Sprocs.sql *<data tablespace>* *<index tablespace>* *<action code>*

   > **Note:** Action code is `0` or `1`. `0` does not remove data from the 3.0 tables; it creates tables that store the duplicates that would have been deleted if `1` was selected. `1` removes the duplicates and stores them in tables created during the sproc execution.

The `Create_Sprocs.sql` and `Execute_Sprocs.sql` scripts create and run the following stored procedures in the order presented to remove duplicates and nulls for 3.0 data:

- `Nulls_IAChangeLog.sql`
- `Nulls_IVRInteraval.sql`
- `Nulls_SurveyObjectToSurveyPrompt.sql`
- `Nulls_SurveyUserObjectSecurityPrompt.sql`
- `Nulls_UserWorkGroups.sql`
- `Delete_Dups_AgentActivityLog.sql`
- `Delete_Dups_AgentQueueActivationHist.sal`
- `Delete_Dups_IAChangeLsql`
- `Delete_Dups_ICDirChangeLog.sql`
- `Delete_Dups_ILineGroupStats.sql`
- `Delete_Dups_ILineStats.sql`
- `Delete_Dups_IPA_Flow_Notes.sql`
- `Delete_Dups_IWrapUpStats.sql`
- `Delete_Dups_LineConfig.sql`
- `Delete_Dups_LineGroupLines.sql`
- `Delete_Dups_SurveyConfigLog.sql`
- `Delete_Dups_SurveyDetail.sql`
- `Delete_Dups_SurveyQuestionEnum.sql`
- `Delete_Dups_SurveyRule.sql`
- `Delete_Dups_SurveyObjectToSurveyPrompt.sql`
- `Delete_Dups_UserWorkGroups.sql`

Upgrade the CIC 2015 R1 or later database schema to the most recent CIC 2015 R1 or later database schema (Oracle)

The 2015 R1 or later Oracle Server scripts are in the `CIC Database Migration Assistant\Scripts\oracle\target` directory.

Run the scripts in the following order, one after another. **Don't** run them at the same time. Use the syntax and special directions provided for each script.

1. `Create_User_Role.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @create_user_role.sql *<Schema_Owner>* *<CIC_User>* *<CIC_READONLY>* *<Schema_Owner_Password>* *<CIC_User_Password>* *<CIC_READONLY_Password>*

   > **Note:** You must have system permissions for the Create_User_Role.sql script.

2. `Create_DB_Objects.sp`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Create_DB_Objects.sp

3. `Ora_ICBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_ICBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

4. `Ora_TrackerBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_TrackerBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

5. `Ora_IRBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_IRBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

6. `Ora_OptimizerBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_OptimizerBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

7. `Ora_CSSurveyBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_CSSurveyBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

8. `Ora_WorkflowBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_WorkflowBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

9. `Ora_DialerBuild.sql`

   Run this script from the SQL command-line using the following syntax:

   sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_DialerBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

10. `Ora_IWPBuild.sql`

    Run this script from the SQL command-line using the following syntax:

    sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_IWPBuild.sql *<Data_Tablespace>* *<Index_Tablespace>*

11. `Ora_ICFinalize.sql`

    Run this script from the SQL command-line using the following syntax:

    sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* @Ora_ICFinalize.sql *<Schema_Owner>*

12. `SetUpMigratorUser.sql`

    > **Note:** You must have system permissions for the `SetUpMigratorUser.sql` script.
    > This script includes the `SYS.DBMS_CRYPTO` package. Before you run `SetUpMigratorUser.sql`, ensure that `<dba_user>` is in the `sysdba` role. By default, only Oracle database users with the `sysdba` role have permissions to grant authority to the `SYS.DBMS_CRYPTO` package.

    Run this script from the SQL command-line using the following syntax:

    sqlplus *<User>*/*<Password>*@*<Hostname>*:*<Port>*/*<Service>* as sysdba @SetUpMigratorUser.sql *<Target_Schema>* *<MigrationUserName>* *<MigrationUserPassword>*

Prepare the CIC 3.0 and CIC 2015 R1 or later databases

Prepare the CIC 3.0 and CIC 2015 R1 or later databases (SQL Server)

This section describes how to prepare the CIC 3.0 and CIC 2015 R1 or later databases for the migration.

SQL Server pre-migration procedures for CIC

Modify the recovery mode for SQL Server

If you are migrating a SQL Server database, modify the recovery mode to increase the performance of the migration and reduce disk space requirements. SQL Server has three recovery modes: Full, Simple, and Bulk Logged. By default, the database uses Full recovery mode. Switching to Bulk Logged recovery mode significantly impacts the amount of time required, and the size needed for transaction logs.

To modify the recovery mode for SQL Server:

1. On a first migration run and when the CIC 4.0 database is empty (except for a few rows added to the Tracker tables at install time), delete the Tracker tables.

    > **Note:** You can delete the Tracker tables by selecting the appropriate check box on the **Select Table Groups to Migrate** page in CIC Database Migration Assistant or by running the `Delete_Tables_PreMigration.sql` script located in the `\Scripts` folder in the CIC Database Migration Assistant installation folder.

    The CIC Database Assistant does not delete the `INTX_PARTICIPANT` and `INTXSEGMENT` tables. It is important to note that if any data exists in these two tables, the system doesn't delete the data from any of the Tracker tables. This precaution exists to preserve live 4.0 production data.

    If your 4.0 system is in production, but not live, and you choose to delete all Tracker data, you must complete these steps in the following order:

    a. Delete all data from `INTX_PARTICIPANT`
    b. Delete all data from `INTXSEGMENT`
    c. Select the **Delete Existing Tracker Data** check box or run the `Delete_Tables_PreMigration.sql` script.

2. In Microsoft SQL Server 2008 Management Studio, switch to Bulk Logged recovery mode to take advantage of limited logging.

    > **Note:** Failure to switch to Bulk Logged recovery mode may result in exhausting transaction log disk space.

3. Complete a full backup of the CIC 2015 R1 or later database to have the features associated with the Bulk Logged recovery mode take effect.
4. Proceed with the migration as described in [Migrate the CIC 3.0 Database](#).
5. After migrating the database, switch back to Full recovery mode, or the recovery mode of your choice, and complete a full backup of the CIC 2015 R1 or later database.

    > **Note:** Since changing the recovery mode of the database is something you may not want to do once the database is in production, it is highly recommended that you migrate all the historical data you intend to move before putting the database into production.

Run the SQL Server migration check script

Genesys recommends that you run a migration check script against the CIC 3.0 and CIC 2015 R1 or later databases to identify disabled foreign keys, indexes, and constraints. If the objects are already disabled, it means that the migration will not cause that state for those objects. Run the script again after the migration to see whether any objects remain disabled, and if so, enable them.

SQL Server 2000

If the CIC 3.0 database is SQL Server 2000, run the `MigrationCheckSQL2000.sql` script against the CIC 3.0 database and run the `MigrationCheck.sql` script against the CIC 2015 R1 or later database. The scripts are in the `\Scripts\SqlServer` folder in the CIC Database Migration Assistant installation folder.

SQL Server 2005 or later

If the CIC 3.0 database is SQL Server 2005 or later, run the `MigrationCheck.sql` script against the CIC 3.0 and CIC 2015 R1 or later databases. The script is in the `\Scripts\SqlServer` folder in the CIC Database Migration Assistant installation folder.

(SQL Server 2000) Run script to create the sp_tables_info_rowset_64 stored procedure

If the CIC 3.0 database is a SQL 2000 Server 32-bit version and the CIC 2015 R1 or later database is a SQL Server 2008 64-bit version, add another stored procedure to the SQL 2000 Server.

- If you ran the CIC Database Script Execution Tool to prepare your CIC 3.0 database, it checks for the stored procedure and, if it has sufficient rights, creates it automatically. It notifies you if you need to create it manually.
- If you ran the CIC scripts manually, or the CIC Database Script Execution Tool was unable to create the stored procedure for you, you can run the `SprocToAllowLinkToAccess2000Server.sql` script manually on the CIC 3.0 database. The script creates the `sp_tables_info_rowset_64` stored procedure. If you try to link the SQL Server 2008 64-bit version to the SQL 2000 Server 32-bit version without running the script, an error occurs. The error occurs because the SQL 2000 Server 32-bit version does not contain the `sp_tables_info_rowset_64` stored procedure, which the SQL Server 2008 64-bit version uses when running the distributed query.

For reference, here are the contents of the stored procedure:

```
CREATE PROCEDURE sp_tables_info_rowset_64
@table_name SYSNAME,
@table_schema SYSNAME = NULL,
@table_type SYSNAME = NULL
AS
DECLARE @Result INT SET @Result = 0
EXEC @Result = sp_tables_info_rowset @table_name, @table_schema, @table_type
GO
```

Change the remote query timeout

The target database queries the source database for records during the migration using a link created when running the CIC Database Migration Assistant. Queries on this link may take more time to complete than normal queries. To keep from experiencing timeout errors, Genesys recommends that you set the timeout to a very large value or disable it. The following commands modify the remote query timeout value when run from the target server.

```
sp_configure 'remote query timeout', 0;
GO
RECONFIGURE;
GO
```

After the data migration, you can change the value back to the default value of 600 (10 minutes).

Create a SQL Server migration user

When running CIC Database Migration Assistant, the database user you specify on the **Database Server Credentials** page must have a particular set of rights. Otherwise, the migration doesn't function properly. Genesys included a script to create a temporary user with the minimum required permissions. Genesys highly recommends that you create a user with permissions to run a migration so that you don't have to keep going back to the DBA when migrating multiple databases.

Genesys provides a script that:
- Creates a migration user
- Assigns the DB_OWNER role to the user
- Assigns permissions that allow the user to create and use linked servers
- Assigns the user to a specific CIC 4.0 database

Run the `SetupMigratorUser.sql` script from the command-line before starting the migration process. If you are also migrating Interaction Dialer, run this script after the migration creates the Dialer 4.0 database, but before running the CIC Database Migration Assistant for Dialer. Since the same migration user may migrate multiple databases, run the script before each migration and specify the CIC 4.0 databases. Following is an example for calling the script:

```
sqlcmd -S MyTargetServer -U sa -P SaPassword -i "C:\Program Files (x86)\Interactive Intelligence\CIC
Database Migration Assistant\Scripts\sqlserver\SetupMigratorUser.sql" -o "c:\temp\test.log" -v
MigratorUser=MigUser Password=MyPassWord Database=MyTargetDatabase
```

Note: Option `-o` (output file) is optional.

Prepare the CIC 3.0 and CIC 2015 R1 or later databases (Oracle)

This section describes how to prepare the CIC 3.0 and CIC 2015 R1 or later databases for the migration.

Oracle pre-migration procedures for CIC

Create data and index tablespaces

The physical data for `ININ_MIGRATION` objects are in the Oracle ININ data and index tablespaces. Genesys recommends that you use different tablespaces than the ones used to store CIC 2015 R1 or later data to isolate and better retain database migration history data. Create the necessary tablespaces before running CIC Database Migration Assistant. For more information about tablespaces, see [Appendix C: Oracle Tablespaces](#).

Set the authentication parameter for CIC

The `SQLNET.AUTHENTICATION_SERVICES` parameter determines whether to allow access to the Oracle database server using a valid user name and password or NTS for Windows NT native authentication. Genesys recommends that you set the parameter to `(NONE)` to allow access to the Oracle database server using a valid user name and password. If the parameter is set to `(NTS)`, the CIC Database Migration Assistant scripts may not run successfully. To set the parameter, access the `SQLNET.ora` file in your Oracle root directory and change the parameter so it reads as follows: `SQLNET.AUTHENTICATION_SERVICES= (NONE)`.

Run Oracle migration check script

Genesys recommends that you run a migration check script against the CIC 3.0 and CIC 2015 R1 or later databases to identify disabled foreign keys, indexes, and constraints. If the objects are disabled, it means that the migration doesn't cause that state for those objects. Run the script again after the migration to see whether any objects remain disabled, and if so, enable them.

If you are migrating an Oracle database, run the `MigrationCheck.sql` script against the CIC 3.0 and CIC 2015 R1 or later databases. The script is in the `\Scripts\Oracle` folder in the CIC Database Migration Assistant installation folder.

Create an Oracle migration user

When running CIC Database Migration Assistant, the database user you specify on the **Database Server Credentials** page must have a particular set of rights. Otherwise, the migration doesn't function properly.

> **Note:** Oracle system/sa permissions do not work for migrations.

You can run the migration as a user that is not the CIC 2015 R1 or later database schema owner. The required permissions are sweeping and provide broad access across all schemas, and limit the validity or existence of a user that can do almost anything to any schema. Genesys requires that you run the migration as a user other than the CIC 2015 R1 or later database schema owner. The migration allows only one database user to migrate data into one particular CIC 4.0 database schema. The migration creates database objects, notably key translation tables, specific to the CIC 2015 R1 or later database schema that the user who runs the migration owns. If you are planning to make other database migrations into the same CIC 2015 R1 or later database schema, those database objects are valuable to retain.

Run the `SetupMigratorUser.sql` script after creating the CIC 2015 R1 or later database but *before running CIC Database Migration Assistant*. If you are also migrating **Interaction Dialer**, run this script after creating the Dialer 2015 R1 or later database, but before running the CIC Database Migration Assistant for Dialer. The script is in the `\Scripts\Oracle` folder in the CIC Database Migration Assistant installation folder. Run the script as a DBA user, logged on as SYSDBA.

The script requires the following parameters:

1. The name of the CIC 2015 R1 or later database schema. This schema is the same as the one the CIC 2015 R1 or later administrative database user created when you ra CIC Setup Assistant as part of the CIC 4.0 server installation.
2. The name of the database user running the migration. This name is the user name specified in the **User Name** box on the **Database Server Credentials** page.
3. The password for the user specified in the second parameter.

Example command

The following is an example of the command, assuming it is run in the same directory as the `SetupMigratorUser.sql` script:

```
sqlplus <dba user>/<dba pw>@<server>:<port>/<instance> as sysdba @SetupMigratorUser.sql <4.0
target> <migrator user> <migrator pw>
```

where:

- `<dba user>` is the database user name of the DBA user
- `<dba pw>` is the `<dba user>` password
- `<server>` is the name or IP address of the CIC 4.0 database server
- `<port>` is the TCP port that the CIC 4.0 database server listens on
- `<instance>` is the instance of the CIC 4.0 database
- `<4.0 target>` is the CIC 4.0 schema name
- `<migrator user>` is the database user running the migration
- `<migrator pw>` is the `<migrator user>` password

The script assigns the following system permissions to the database user specified as the `<migrator user>`:

ALTER ANY INDEX	ALTER ANY PROCEDURE	ALTER ANY SEQUENCE
ALTER ANY TABLE	CREATE ANY INDEX	CREATE ANY PROCEDURE
CREATE ANY SEQUENCE	CREATE ANY TABLE	CREATE ANY TYPE
CREATE ANY VIEW	CREATE DATABASE LINK	CREATE SEQUENCE
CREATE SYNONYM	CREATE TABLE	CREATE USER
CREATE VIEW	DELETE ANY TABLE	DROP ANY INDEX
DROP ANY PROCEDURE	DROP ANY SEQUENCE	DROP ANY TABLE
DROP ANY VIEW	EXECUTE ANY PROCEDURE	EXECUTE ANY TYPE
GRANT ANY PRIVILEGE	INSERT ANY TABLE	SELECT ANY DICTIONARY
SELECT ANY SEQUENCE	SELECT ANY TABLE	UPDATE ANY TABLE

The script assigns the following package execution permissions to the *<migrator user>*:

EXECUTE ON SYS.DBMS_CRYPTO

The script assigns the following roles to the *<migrator user>*:

SELECT_CATALOG_ROLE

The script grants the specific object permissions to the *<migrator user>*:

SELECT ON <4.0 target>.ININ_APP_VERSION

The script assigns a number of permissive system permissions to *<migrator user>*. An Oracle DBA can lock the *<migrator user>* account after running a migration. The script checks to see whether the *<migrator user>* account is locked and unlocks it automatically.

> **Note: F**or the Interaction Recorder and Survey migrations to function properly, if the ININ_MIGRATION user doesn't exist under Oracle, the migration utility creates it. It also locks the ININ_MIGRATION user account (makes it unavailable to log on under), and assigns it the following permissions:
> - ALTER ANY INDEX
> - ALTER ANY TABLE
> - CREATE ANY INDEX
> - CREATE ANY PROCEDURE
> - CREATE SEQUENCE
> - CREATE TABLE
> - GRANT SELECT ANY TABLE
> - ALTER USER ININ_MIGRATION QUOTA UNLIMITED ON *&xTbLTsp*' where *&xTbLTsp* is the value supplied in the UI
> - ALTER USER ININ_MIGRATION QUOTA UNLIMITED ON *&xIdxTsp*' where *&xIdxTsp* is the value supplied in the UI

Change commit frequency

To change how often the inserts commit to the database during migration, in the restart tables, change the value in the **CommitFrequency** column. You can change these values while the migration is running. Be sure that the changes commit immediately after the update; otherwise, the migration process can hang while waiting for the system to release the lock.

The default value in the **CommitFrequency** column is 1,000, meaning that for every 1,000 records written to the table, the script issues a commit. You can raise or lower the value. If the CIC 4.0 database is an active production database with users accessing it, you can change to a lower value to increase user concurrency. The lower value prevents or reduces database timeouts due to locked table records. Setting the number to a lower value can result in a slower migration process. If users are not accessing the CIC 4.0 database actively, you can change to a higher value, which can result in a faster migration process.

CommitFrequency only applies to Interaction Recorder tables, Survey tables, and the following tables: `CallDetail`, `IAgentQueueStats`, `IStatusGroup`, and `IWrkgrpQueueStats`. The latter four tables have a corresponding restart table:

- `ININ_MIGRATION.CallDetail_Restart`
- `ININ_MIGRATION.IAgentQueueStats_Restart`
- `ININ_MIGRATION.IStatsGroup_Restart`
- `ININ_MIGRATION.IWkgrpQueueStats_Restart`

Commit Frequency Command

To update the commit frequency for these tables, issue the following SQL Server or Oracle command:

```
update inin_migration.CallDetail_restart set CommitFrequency = <new value>;

update inin_migration.IAgentQueueStats_restart set CommitFrequency = <new value>;

update inin_migration.IStatsGroup_restart set CommitFrequency = <new value>;

update inin_migration.IWrkgrpQueueStats_restart set CommitFrequency = <new value>;

COMMIT; (Oracle only)
```

> **Notes:**
> - After running the command for Oracle, issue a `COMMIT` statement.
> - There is no need to specify a `WHERE` clause because these four tables contain only one row each.

Interaction Optimizer considerations

The current release of the migration package supports an *all in one* bulk migration of Interaction Optimizer data. Genesys doesn't support mixing the data between CIC 3.0 and CIC 2015 R1 or later. When you run the CIC Database Migration Assistant as described in CIC 3.0 Database Migration, and select **Optimizer Group**:

- ALL records (not restricted by date range or Site ID) import to the target database as long as there are no 2015 R1 or later Interaction Optimizer records in the target database.

  > **Note:** You can delete the 4.02015 R1 or later Optimizer records by running the `Delete_Optimizer_Tables_PreMigration.sql` script in the `\Scripts` folder in the CIC Database Migration Assistant installation folder before migrating the CIC database.

- You must ensure that all Optimizer agents go live on the new 4.0/2015 R1 or later environment after you migrate Optimizer data contained in the database. This confirmation ensures that no mixing of data between CIC 3.0 and CIC 2015 R1 or later occurs.

Before running CIC Database Migration Assistant, ensure that you updated the CIC 3.0 database schema for Interaction Optimizer to the CIC 3.0 SU 14 database schema before migrating Interaction Optimizer data as described in Upgrade the CIC 2.4/3.0 and CIC 2015 R1 or later database schema (SQL Server) or Upgrade the CIC 2.4/3.0 and CIC 2015 R1 or later database schema (Oracle).

Complete Interaction Tracker table group pre-migration procedures

If applicable, complete the following Interaction Tracker table group pre-migration procedures:
- Sync Tracker Configuration data on the source CIC server
- Migrate Tracker Configuration table group on the source CIC server

Sync Tracker Configuration data on the source IC server

Before migrating Tracker Configuration data, sync the current state of DS on the CIC 2.4/3.0 server to the CIC 3.0 database. It's important that you sync the DS state so that the Tracker Configuration data that migrates to the CIC 4.02015 R1 or later database is as current as possible.

To sync Tracker Configuration data:

1. In Interaction Administrator, click the **Interaction Tracker** container.
2. In the right panel, double-click **Configuration**.
3. In the **Interaction Tracker Configuration** dialog box, click the **Import and Reassignment** tab.
4. On the **Import and Reassignment** tab, in the **IC User Import** section, select the **Update existing entries** check box. Leave the **Home Site IDs** box blank and then click **Import Users Now**.

5. Click **OK**. The system places an entry in the event log when this process completes.

Migrate Tracker Configuration table group on the source CIC server

Ensure that you migrate the Tracker Configuration table group before importing data using Interaction Migrator. If you import data before migrating these table groups, the result is duplicate entries with different ID keys, and historical reports that don't run correctly.

Migrate the Tracker Configuration table group for **any** CIC database that you ever intend to merge into this new CIC 2015 R1 or later database, including multi-site configurations with databases local to each site. For instructions on how to import, see Import CIC 2.4/3.0 Configuration Data.

> **Note:** If you started the CIC 2015 R1 or later server before migrating the Tracker Configuration table group, delete the records in the Tracker Configuration table group in the CIC 2015 R1 or later database. Only do this step *the first time CIC Database Migration Assistant* attempts to migrate the Tracker Configuration table group. This process ensures that prior contact and organization details can migrate cleanly.

Ensure that the following tables are empty before migrating for the *first time*:

- `dbo.Individual;`
- `dbo.Location;`
- `dbo.Organization;`
- `dbo.AddrType;`
- `dbo.AttributeType;`
- `dbo.ConnectionType;`
- `dbo.ConnSubType;`
- `dbo.IndivType;`
- `dbo.IntxType;`
- `dbo.OrgType;`
- `dbo.Title;`

Prepare the CIC 3.0 and CIC 2015 R1 or later servers (SQL Server and Oracle)

This section describes how to prepare the CIC 3.0 and CIC 2015 R1 or later servers for the migration.

Apply Interaction Recorder ESs

- **CIC 3.0**: If you are on CIC 3.0 SU 14, apply ES SU14-ES_CIC-102681. If you are on CIC 3.0 SU 15, apply ES SU-15-ES_102681. These ESs contains several updates and are especially important for customers running against a SQL 2000 database and for all Interaction Recorder customers.
- **CIC 2015 R1 or later**: CIC 4.0 SU 3 and later systems required no ESs when Genesys updated this guide last.

Stop purge processes on CIC 3.0 and CIC 2015 R1 or later servers

CIC servers often have an automated process set up to delete records older than a set number of days. If the purge process is in effect on either the CIC 3.0 or CIC 4.02015 R1 or later server, it can complicate verification of the migration process. For example, if Tracker `Intx_Participant` rows are migrated from the CIC 3.0 server, and the CIC 3.0 server deletes data older than 400 days, but the CIC 2015 R1 or later server deletes data older than 30 days, it would appear that data did not get migrated to the CIC 4.0 server correctly. Similarly, if SQL `COUNT(*)` statements are used to verify that the number of records moved, the count can vary from one day to the next because data is getting purged.
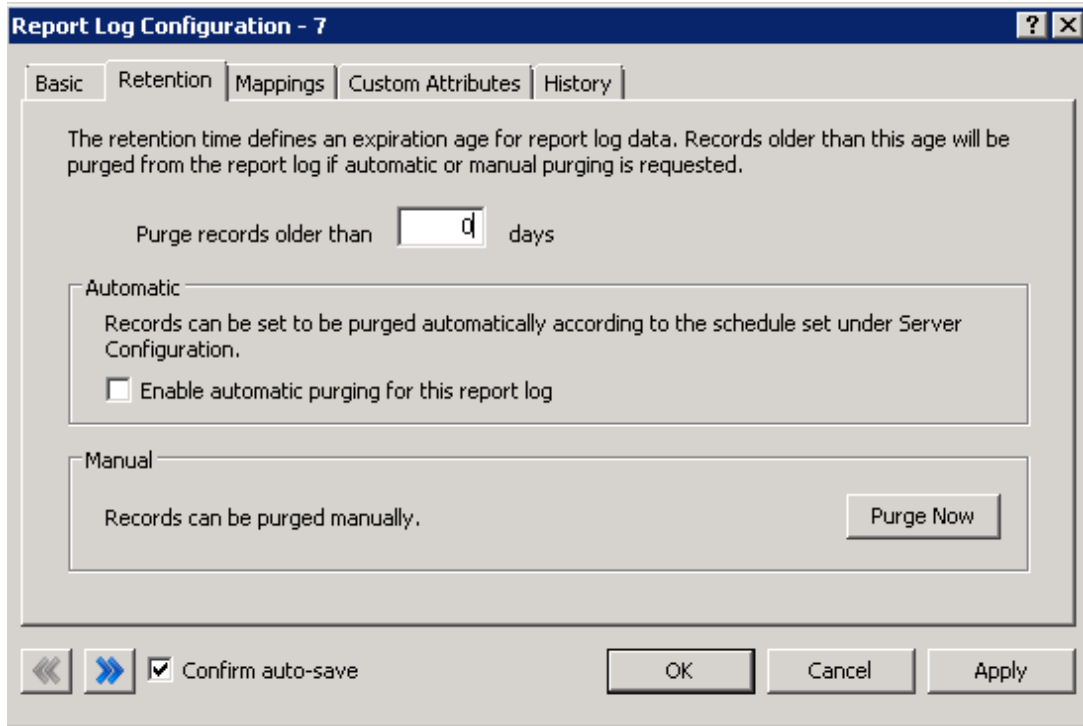
> **Tip:** Genesys recommends that you stop the purge process on both the CIC 3.0 and CIC 2015 R1 or later servers during the migration process. If stopping the purge process is not feasible, the verification process is more complicated. At a minimum, ensure that the CIC 3.0 and CIC 2015 R1 or later servers have the same purge criteria in place for the duration of the migration process.

Stop Reporting data purging

Complete these steps on both the CIC 3.0 and CIC 2015 R1 or later servers for each report log (base or custom).

To stop Reporting data purging:
1. In Interaction Administrator, click the **System Configuration** container and then click the **Report Logs** subcontainer.
2. In the right-side pane, double-click a report.
3. In the **Report Log Configuration** dialog box, click the **Retention** tab.
4. On the **Retention** tab, clear the **Enable automatic purging for this report log** check box and click **Apply**.

5. Repeat for all report logs.

Stop Interaction Recorder data purging

If you use Interaction Recorder, stop data purging on the CIC 3.0 and CIC 2015 R1 or later servers.

To stop Recorder data purging on the CIC 3.0 server:
1. In Interaction Administrator, click the **Interaction Recorder** container.
2. In the right-side pane, double-click **Configuration**.
3. In the **Interaction Recorder Configuration** dialog box, click the **Data Purging** tab.
4. On the **Data Purging** tab, clear the **Enable Purging** check box and then click **OK**.
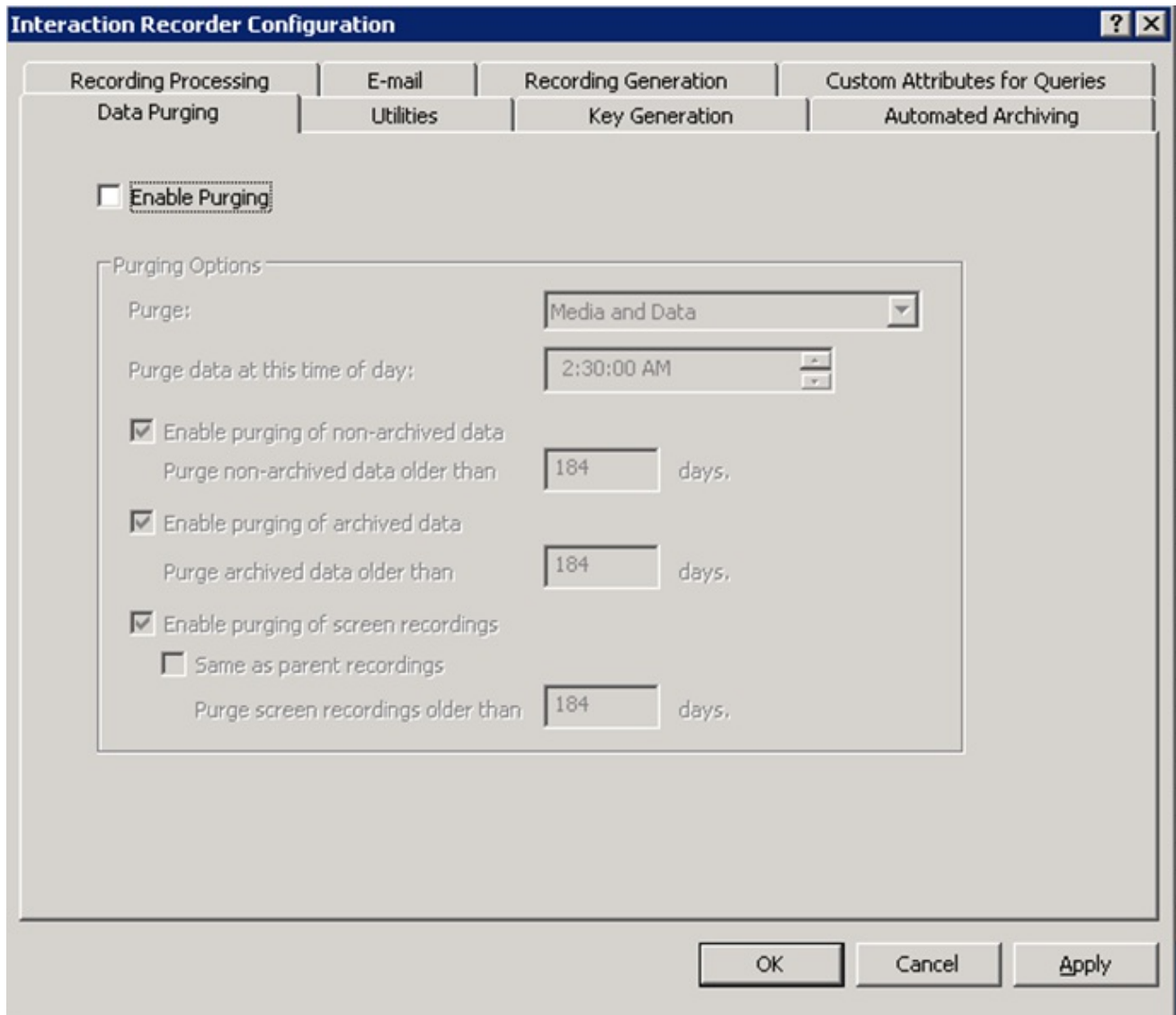
To stop Interaction Recorder data purging on the CIC 2015 R1 or later server:

1. In Interaction Administrator, click the **Interaction Recorder** container and then click the **Policy Editor** subcontainer.
2. In the right-side pane, double-click **Configuration**.
3. In the **Interaction Recorder Policy Editor** dialog box, click the **Retention** tab.
4. On the **Retention** tab, clear the check box next to your purge policy and then, in the menu bar, click **Re-apply**.
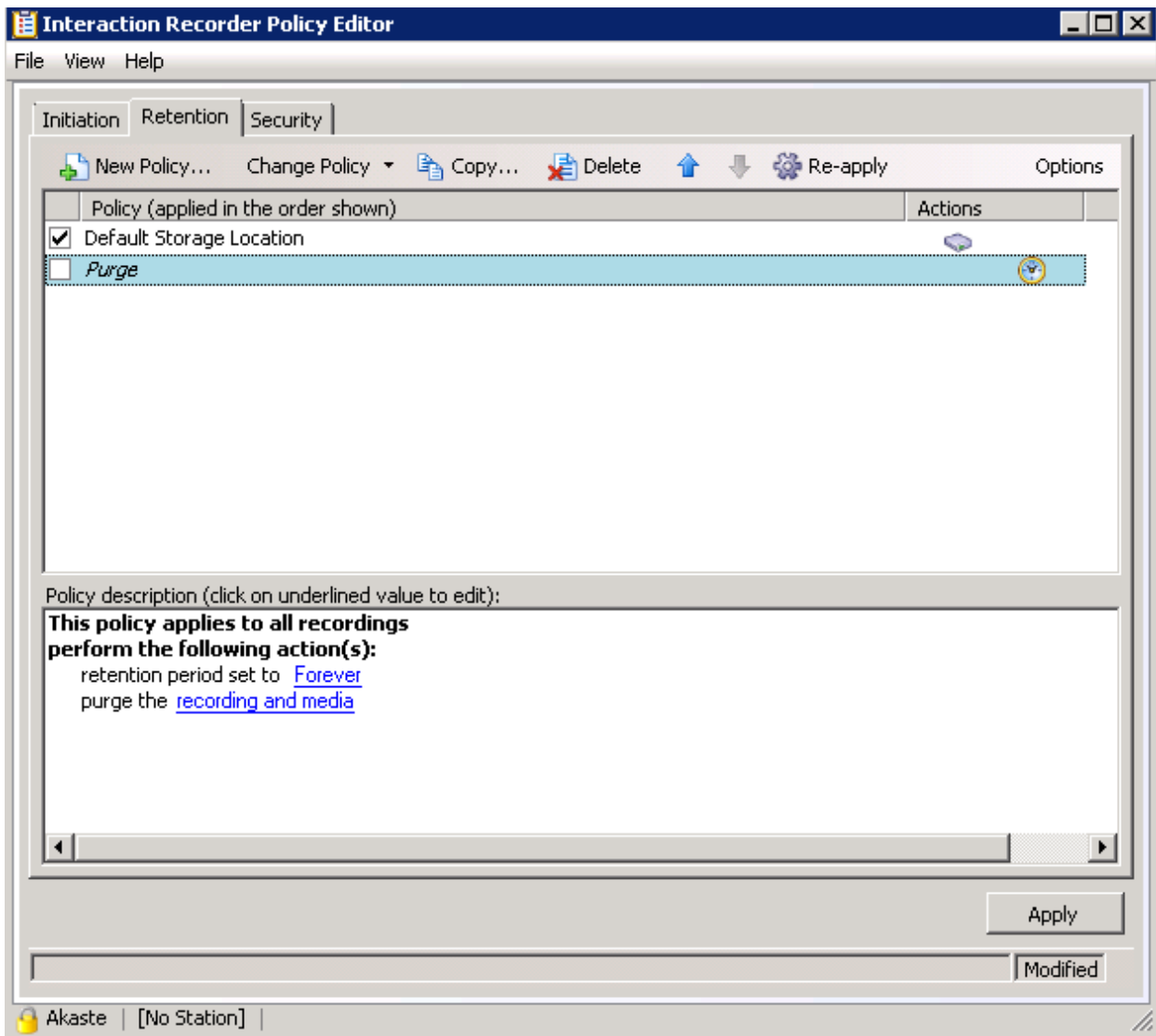
5. In the **Re-apply retention policies** dialog box, click **Re-apply to all recordings** and then click **OK**.

Stop Interaction Tracker data purging on the CIC 3.0 and CIC 2015 R1 or later servers

Complete these steps on both the CIC 3.0 and CIC 2015 R1 or later servers.

To stop Tracker data purging:
1. In Interaction Administrator, click the **Interaction Tracker** container.
2. In the right-side pane, double-click **Configuration**.
3. In the **Interaction Tracker Configuration** dialog box, click the **Data Purging** tab.
4. On the **Data Purging** tab, clear the **Enable Purging** check box and then click **OK**.
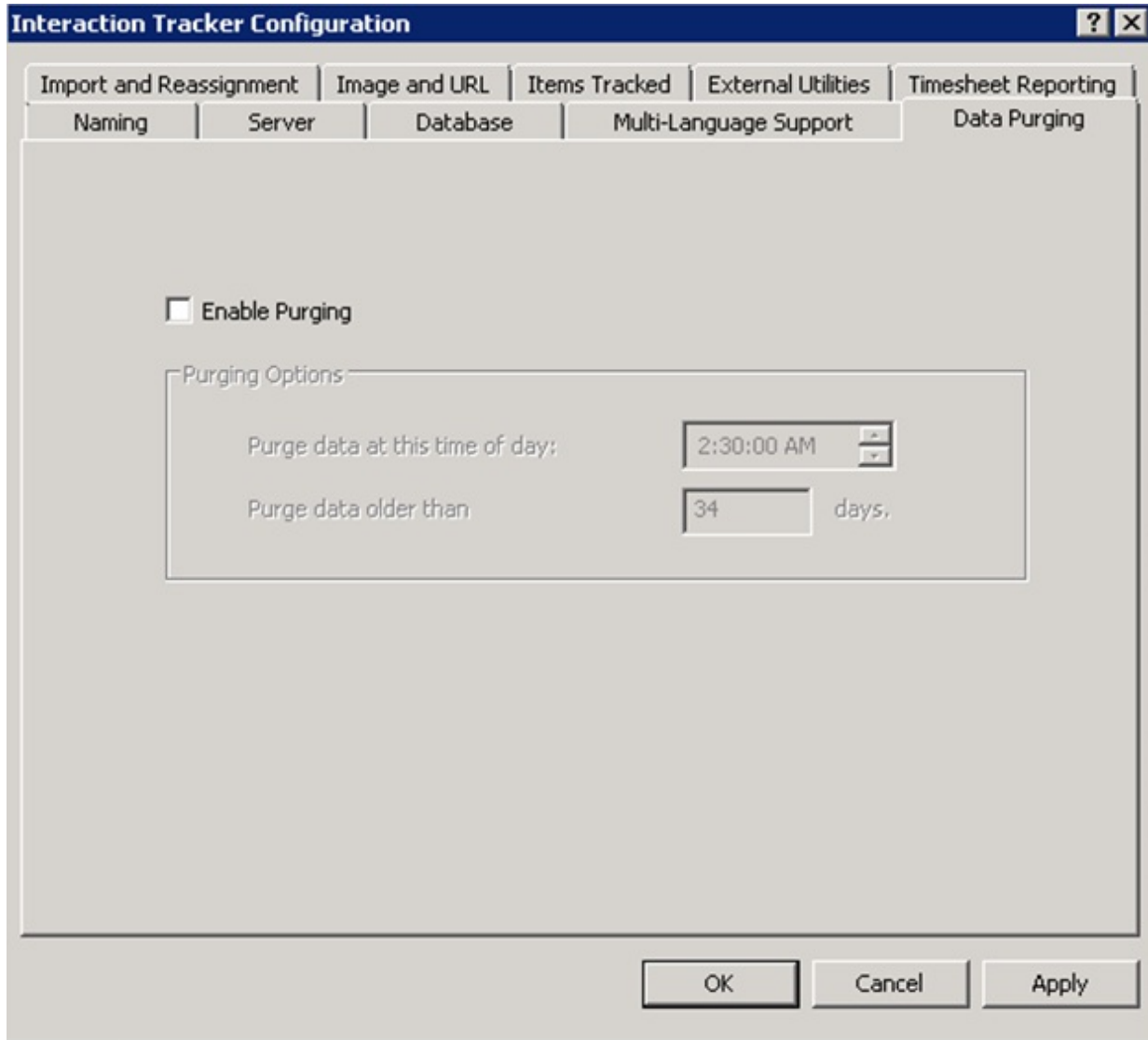
Rescue orphaned recordings in Interaction Recorder (SQL Server and Oracle)

If you use Interaction Recorder and you have orphaned recordings, note they don't migrate when you run CIC Database Migration Assistant. Orphaned recordings occur when something happens while processing a recording that renders the recording invalid. Orphaned recordings don't show up in CIC 2.4 or CIC 3.0 recording searches.

Genesys recommends that you rescue the orphaned recordings before running CIC Database Migration Assistant so that they migrate. For more information about rescuing recordings, see the *How to reprocess/rescue recordings guide* at:
https://my.inin.com/support/selfhelp/Recorder/Pages/Best-Practices.aspx#how_to_guides.

CIC 3.0 Database Migration

This section provides instructions for migrating a CIC 3.0 database to a CIC 2015 R1 or later database using CIC Database Migration Assistant.

> **Note:** The current version of CIC Database Migration Assistant contains updated tools and scripts for CIC 4.0 SU 3 and later for both SQL Server and Oracle.

How CIC Database Migration Assistant migrates the database

CIC Database Migration Assistant does the following when updating the database on the database server:

- Checks to see whether the database schema matches this version of CIC Database Migration Assistant and displays a message when the schema is out of date.
- Generates custom script files from the tables, date ranges, and site IDs that you specify.
- Runs the custom script files if you choose that option. (Alternatively, though not recommended, you can run the scripts manually.)
- Tracks the specified configuration along with the migrated data to assist with migrating multiple sets of data.

Migration scenarios

There are two scenarios for migrating from a CIC 3.0 database to a CIC 2015 R1 or later database: one-to-one or many-to-one. The process you use to migrate depends on your situation.

One-to-one migration

The current release of the CIC 2.4/3.0 to CIC 2015 R1 or later migration package supports only one-to-one migrations. Genesys recommends this method for migrating from a CIC 3.0 to a CIC 2015 R1 or later database.

A one-to-one migration scenario migrates a single CIC 3.0 database to a single CIC 2015 R1 or later database. You could have multiple CIC 3.0 and CIC 4.02015 R1 or later databases; however, you are migrating on a one-to-one basis. So, for each CIC 3.0 database, you have a corresponding CIC 2015 R1 or later database you are migrating to.

Many-to-one migration

A many-to-one migration scenario migrates two or more CIC 3.0 databases to a single CIC 2015 R1 or later database. Run CIC Database Migration Assistant and migrate the first CIC 3.0 database to the single CIC 2015 R1 or later database. Run it again to migrate each subsequent CIC 3.0 database to the same CIC 4.0 database.

> **Notes:**
> - It is important that the CIC 3.0 servers that used the separate databases have different site IDs. If the CIC 3.0 servers have the same site ID, data imported can conflict with data from another database. If you have this issue, contact PureConnect Customer Care for special instructions on how to proceed.
> - If you have Interaction Feedback surveys in use on the CIC 3.0 database, run a one-to-one migration since surveys have no distinguishing column for site ID.
> - If you use Interaction Optimizer, Genesys supports one-to-one migrations only.

Incremental migrations

When you run CIC Database Migration Assistant, you can select a previous migration to use those settings and configurations. You can then modify those settings and configurations, if needed, before continuing with the migration. For example, to migrate in three-month increments, select and migrate the first three-month date range. Restart CIC Database Migration Assistant, select that same migration run, change the date range, and migrate the next three-month date range.

> **Notes:**
> - Genesys highly recommends that you migrate all the historical data you intend to move before putting the database into production.
> - Running Interaction Optimizer on two different CIC servers using two different databases. Therefore, Genesys doesn't support running a many-to-one migration. For more information on bulk migration of Interaction Optimizer data, see Optimizer table group considerations.

Optimizer table group considerations

The current release of the migration package supports an *all in one* bulk migration of Interaction Optimizer data. Genesys doesn't support mixing the data between CIC 3.0 and CIC 2015 R1 or later. When you run the CIC Database Migration Assistant as described in this section and select the **Optimizer Group**:

- ALL records (not restricted by date range or Site ID) import to the target database as long as there are no 2015 R1 or later Interaction Optimizer records in the target database.

  > **Note:** You can delete the 2015 R1 or later Optimizer records by running the `Delete_Optimizer_Tables_PreMigration.sql` script in the `\Scripts` folder in the CIC Database Migration Assistant installation folder *before* migrating the CIC database.

- Ensure that all Optimizer agents go live on the new 4.0/2015 R1 or later environment after you migrate Optimizer data contained in the database. This confirmation ensures that no mixing of data between CIC 3.0 and CIC 2015 R1 or later occurs.
- If data exists in the Interaction Optimizer tables in the target database prior to migration, CIC Database Migration Assistant deletes the data before migration continues. The data from CIC 3.0 cannot merge into existing data. Once you select the Interaction Optimizer table group, CIC Database Migration Assistant displays a warning message to confirm the deletion of the data.

Tracker Configuration table group considerations

If you run migrations over time, you could have updates to existing contact records on the CIC 3.0 server after migrating the contact records to CIC 4.0, but before migration of the corresponding users. Examples of possible updates are employee turnover, name changes, and address changes.

For each record in the Tracker Configuration table group, the system checks to see whether there were changes to the data in CIC 3.0 after your initial migration of the Tracker Configuration table group. If there were changes, CIC Database Migration Assistant displays a list of changed records and allows you to select the records to update in the CIC 2015 R1 or later database.

The `TrackerUpdateScript` script, created during script generation, updates the CIC 2015 R1 or later tables with the information from the CIC 3.0 tables for the records that you selected. The system runs the script when all the other generated scripts are run, unless you choose to run the scripts manually. In that case, you run the script manually in the order specified in the migration scripts batch file.

> **Important!**
>
> Once you migrate the Tracker Configuration data and begin changing data in CIC 4.0, *do not* go back and change data in CIC 3.0. If you change data in CIC 2015 R1 or later and then go back and change data in CIC 3.0, the CIC 3.0 record will have a higher *version* number. If you begin another migration, the system detects the difference in version numbers and includes the CIC 3.0 record in the list. You could inadvertently select a record for update and overwrite the CIC 2015 R1 or later record with data from the CIC 3.0 record that possibly isn't as current as the CIC 2015 R1 or later record.

Customized service levels

In CIC 2015 R1 or later, Genesys added columns to tables in the CIC database to support changes in Interaction Reporter 2015 R1 or later queue reports. Currently, the CIC Database Migration Assistant populates the values in these columns with the default values for Service Levels found in CIC 2.4/3.0.

If you changed the default values and plan to use service level queue reports in 2015 R1 or later against your historical data, update the default data to match your current configuration. This setting **doesn't** migrate automatically; you must set it manually. Check the values on your system in Interaction Administrator and, if needed, contact PureConnect Customer Care for more information.

The following images show where to set these values in CIC 3.0 and CIC 2.4.

CIC 2.4 configuration and default value:
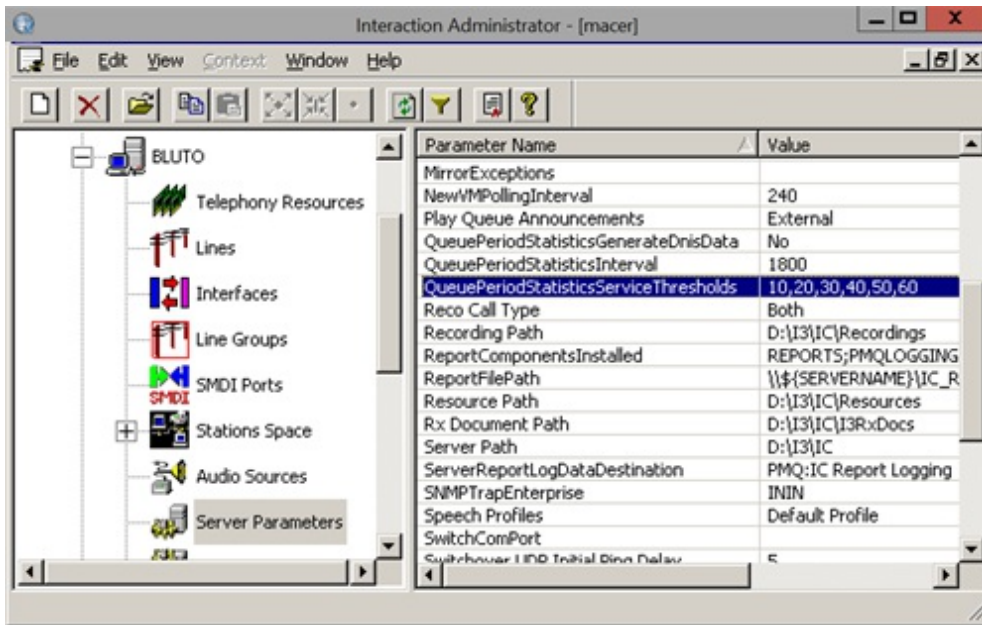
CIC 3.0 configuration and default value:
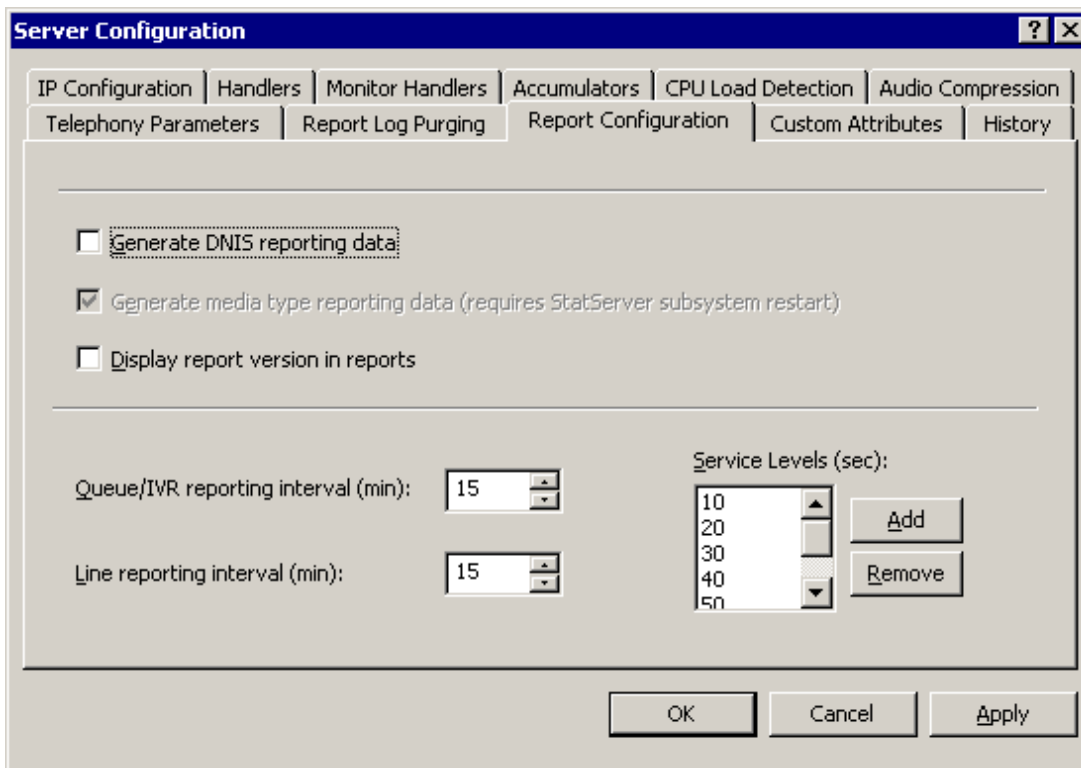
Also, CIC 2015 R1 or later changed from using a system-wide Service Level configuration to allowing you to specify different Service Levels for each Workgroup (Queue). If you customized your CIC 2.4 or CIC 3.0 system, change each workgroup manually that you want to continue to have custom Service Levels.

About the Migration scripts

CIC Database Migration Assistant generates several scripts for migrating the databases. The scripts are in the `%APPDATA%\Interactive Intelligence\MigrationUtility\<date_time>` folder.

You can allow CIC Database Migration Assistant to run the scripts automatically or close out of CIC Database Migration Assistant and run the scripts manually. Genesys recommends that you allow CIC Database Migration Assistant to run the scripts automatically because it is critical that the scripts run in a specific order.

Migrate the CIC 3.0 database

This section describes how to migrate the CIC database using CIC Database Migration Assistant. Ensure that you are logged on using your CIC Administrator account.

To migrate the CIC 3.0 database:

1. Though not required, Genesys recommends that you stop **CIC Service** on the CIC server (if it is running) to:
   - Ensure that the migration doesn't add new data to the CIC 3.0 database schema while a migration is occurring.
   - Prevent access to a CIC 2015 R1 or later server during migration so that the migration uses the database server exclusively.

   Note: Depending on how much historical reporting data that you have, it can take a long time to migrate your historical data.

2. Start CIC Database Migration Assistant on the CIC Database Migration Assistant client computer from the CIC Database Migration Assistant shortcut on the desktop.

3. On the **Welcome** page, click **Next**.

If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.

4. If this time isn't your first time running CIC Database Migration Assistant, the **Past Migration Utility Executions** page appears. To use settings from a previous migration, or restart a migration to run the scripts, click the migration to run and then click **Next**.
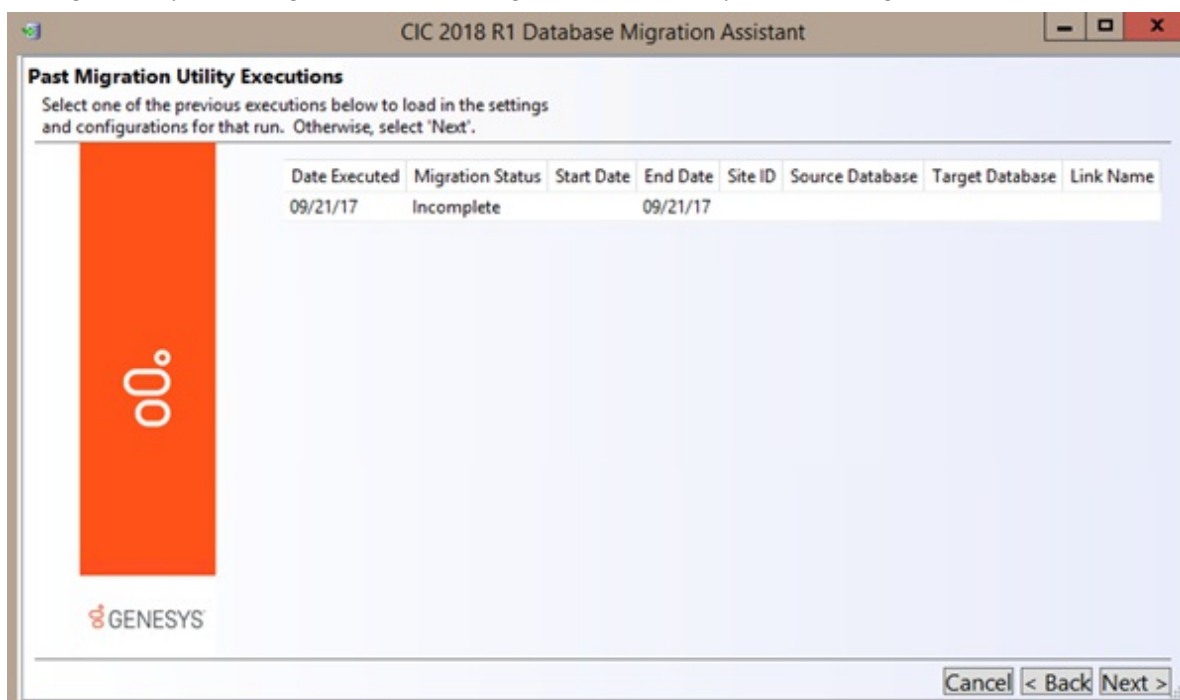
Note: To unselect a migration run, hold down the `Ctrl` key and click the migration run.

The **Past Migration Utility Execution** page contains settings, configuration, and status details of past migrations:

Column	Description
Date Executed	Date that a user opened the CIC Database Migration Assistant.
Migration Status	Status of the script execution. ○ **Completed:** CIC Database Migration Assistant generated and ran the scripts. ○ **Failed version check:** You attempted to migrate from a CIC 3.0 database or to a CIC 4.0 database version that the version of CIC Database Migration Assistant running currently doesn't support. ○ **Incomplete:** You canceled the migration process before the scripts generated. ○ **Ready for restart:** CIC Database Migration Assistant generated the scripts but did not run them. When you are ready, you can restart the migration and have CIC Database Migration Assistant run the scripts. ○ **User completed:** CIC Database Migration Assistant generated the scripts but did not run them. When you are ready, run the scripts manually.
Start Date	Date the migration run started.
End Date	Date the migration run stopped.
Site ID	Site ID of the CIC 3.0 server.
Source Database	CIC 3.0 database to migrate from.
Target Database	CIC 4.0 database to migrate to.
Link Name	Name of the link between the CIC 3.0 and CIC 4.0 databases.

5. On the **Database Server Credentials** page, in the **Server Type** list box, click the type of database server you are using (for example SQL Server or Oracle.)
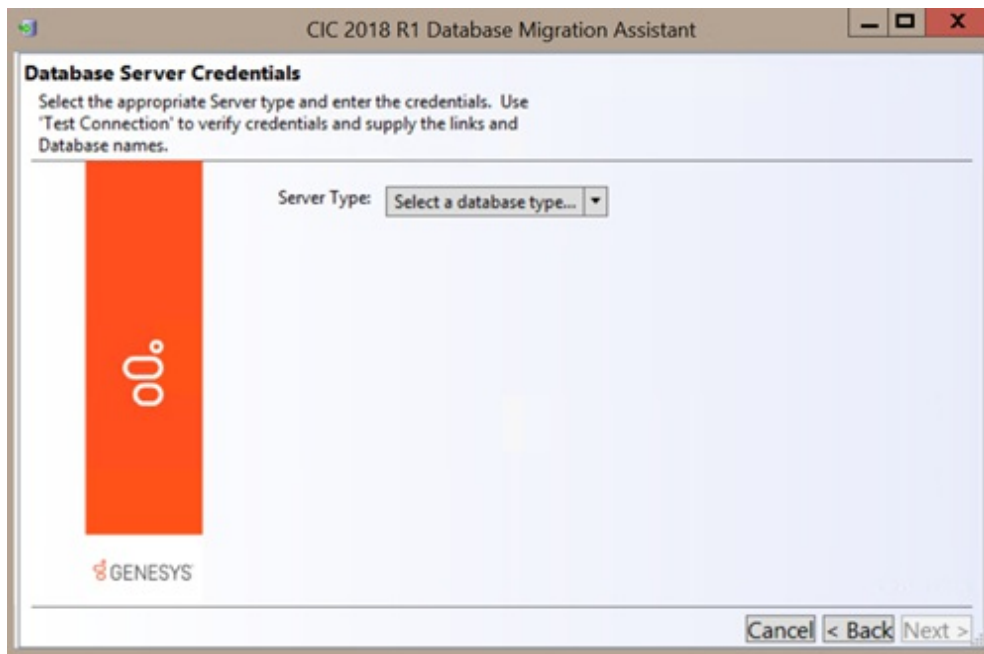
The information that displays differs, depending on the type of server you selected.

6. Provide the requested information for the CIC 2015 R1 or later database server, depending on the server type you specified:

- **For SQL Server:**
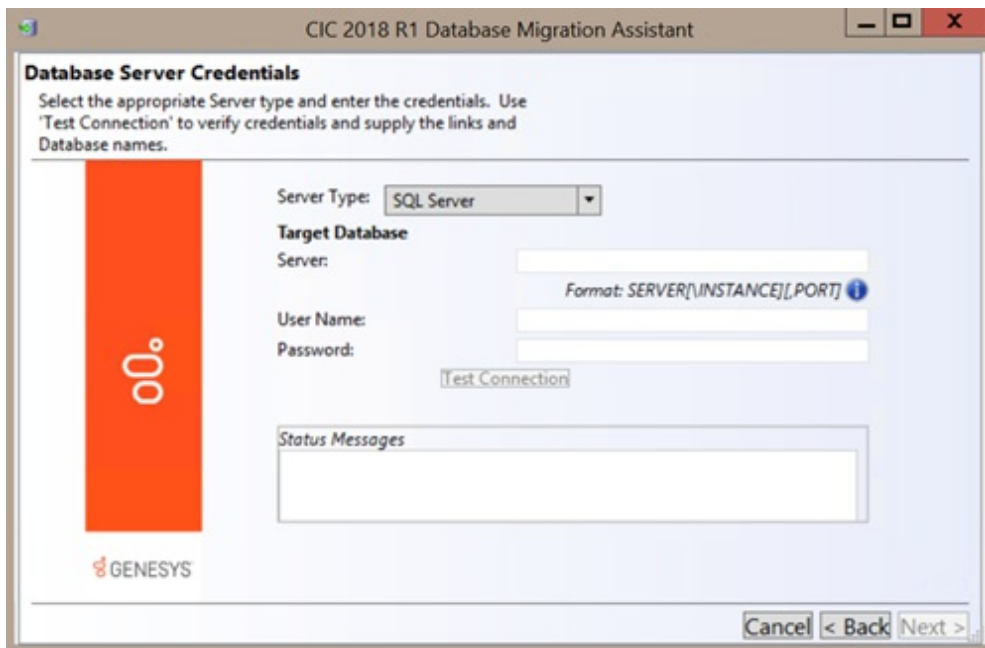
Server: Name of the CIC 4.0 database server. For SQL Server, include the instance and port number of the CIC 4.0 database. To see an example entry, click the information icon under the **Server** box.

User Name: User name for logging on to the CIC 4.0 database server.

Password: Password associated to the user name.

- **For Oracle:**
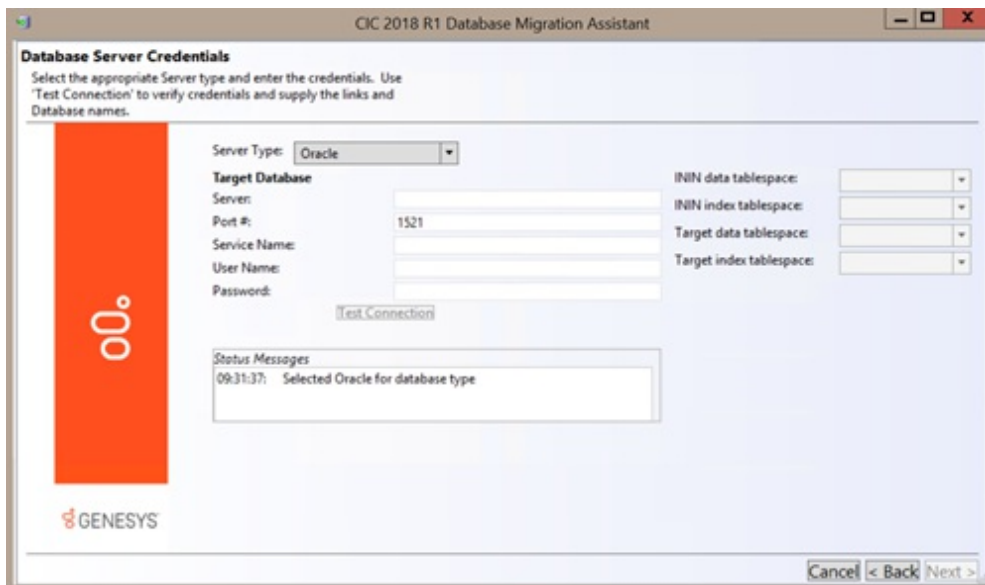
Server: Name of the CIC 4.0 database server. For SQL Server, include the instance and port number of the CIC 4.0 database. To see an example entry, click the information icon under the **Server** box.

Port #: (Oracle only) Port number of the CIC 4.0 database server.

Service Name: (Oracle only) Name of the service this instance of the CIC 4.0 database connects to.

User Name: User name for logging on to the CIC 4.0 database server.

Password: Password associated to the user name.

ININ data tablespace: (Oracle only) Tablespace where the data resides for the `ININ_MIGRATION` schema.

ININ index tablespace: (Oracle only) Tablespace where indexes reside for the `ININ_MIGRATION` schema.

Target data tablespace: (Oracle only) Tablespace where CIC 4.0 tables and stored procedures reside.

Target index tablespace: (Oracle only) Tablespace where CIC 4.0 indexes are stored.

7. Click **Test Connection**. The system tests the following:

- Connection to the CIC 2015 R1 or later database server. If the connection isn't successful, verify the information that you provided is correct.
- (SQL Server) **CREATE LINK** permission. If you don't have this permission, the system displays a message to that effect and **Create Link** is unavailable.
- (Oracle) Permission for running a migration. If you don't have this permission, the system displays a message to that effect. Check your permissions or provide credentials for a user who has the permission.
- (Oracle) Permission to migrate to the selected CIC 2015 R1 or later database. If you don't have this permission, the system displays a message to that effect. Select a different CIC 2015 R1 or later database or check your permissions.

8. A link connects one CIC 3.0 database to one CIC 4.0 database. If a link doesn't exist between the CIC 3.0 and CIC 2015 R1 or later databases, do the following:

   a. On the **Database Server Credentials** page, in the **Links** list box, click **Create Link...**.

   b. In the **Create Link** dialog box, provide the information for the new link and, in the **Link Name** box, type the name to assign to the link. The link name cannot start with a non-alphabetic character.

> **Note:** The information that displays in the **Create Link** dialog box differs depending on the type of server you selected (SQL Server or Oracle).

   c. Click **Create Link...**.

9. On the **Database Server Credentials** page, complete the information and then click **Next**.

Links: Name of the link between the CIC 3.0 and CIC 2015 R1 or later databases.

Source DB name: Name of the CIC 3.0 database to migrate.

Target DB name: Name of the CIC 2015 R1 or later database.

> **Note:** If you attempted to migrate from a CIC 3.0 database version, or to a CIC 2015 R1 or later database version that the currently running version of CIC Database Migration Assistant doesn't support, an error message appears. Ensure that the database version is compatible with this version of CIC Database Migration Assistant, as described in Upgrade the CIC 2.4/3.0 and CIC 2015 R1 or later database schema (SQL Server) or Upgrade the CIC 2.4/3.0 and CIC 2015 R1 or later database schema (Oracle) in Prepare for CIC Database Migration.

10. The CIC Database Migration Assistant checks the source database for compatibility. If the source database is compatible, the system displays a message to that effect. Continue to the next step for selecting table groups to migrate.

    If the source database is not compatible, the CIC Database Migration Assistant requires you to upgrade the source database, repair source data issues, and upgrade the target database. Messages appear under **Status Messages** on the **Database Server Credentials** page to indicate your progress through the following steps:

    a. In the **Verify Source Database** dialog box, type the credentials for the source database and then click **Upgrade Source Database**.
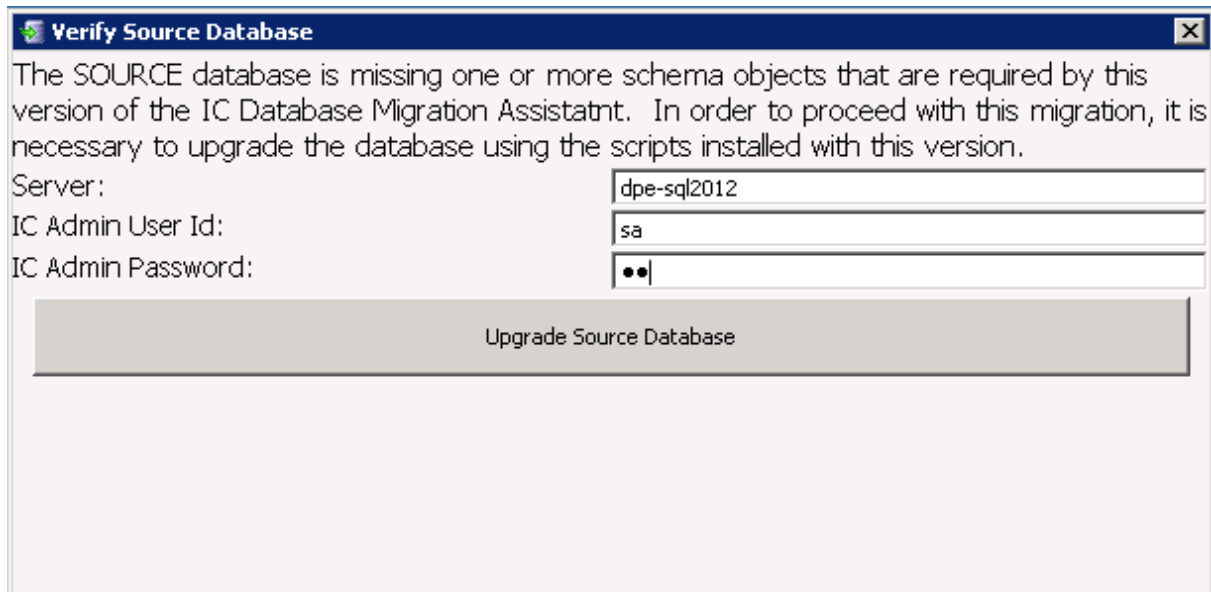
b. In the **Check Source Database** dialog box, type the credentials for the source database and then click **Repair Source Data Issues**.
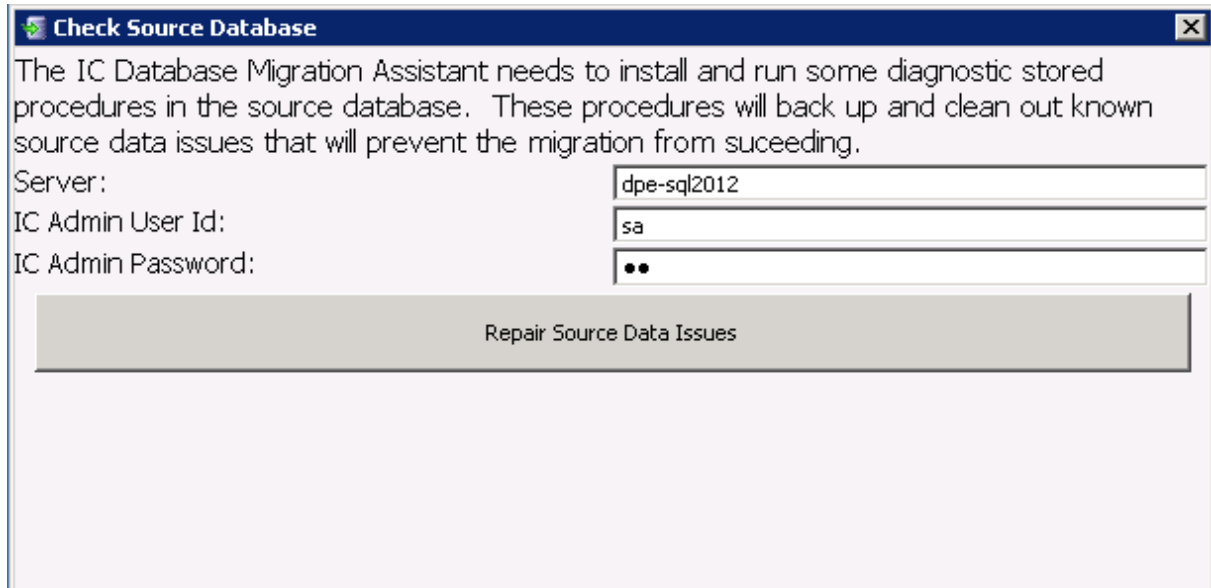
c. In the **Verify Target Database** dialog box, type the credentials for the target database and then click **Upgrade Target Database**.
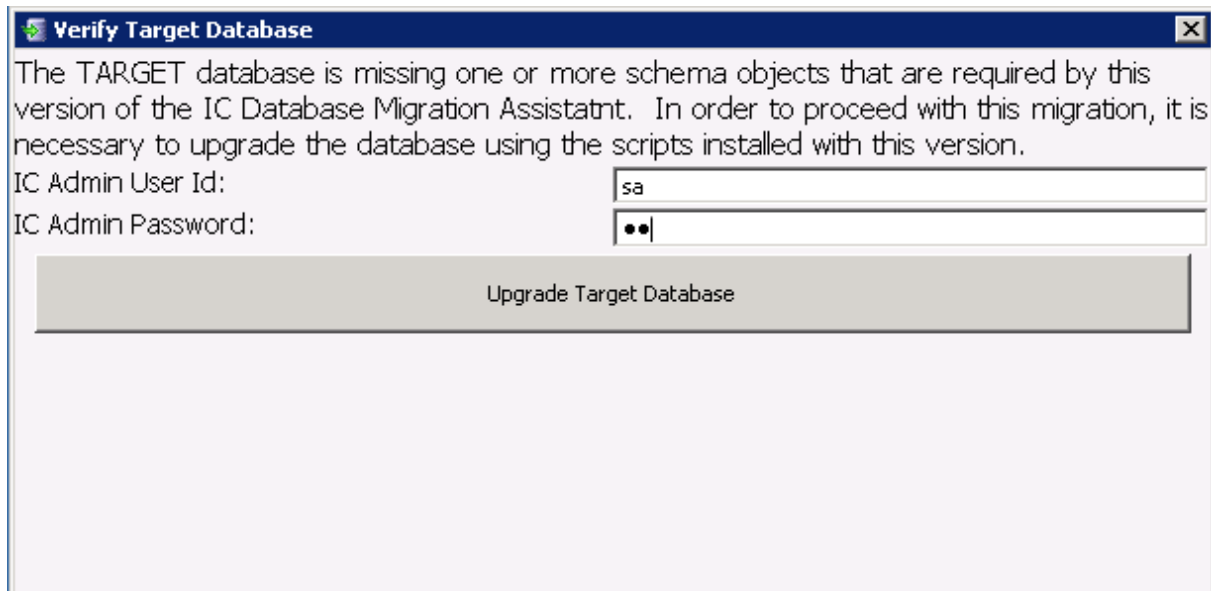
11. On the **Select Table Groups to Migrate** page, select the table groups to migrate and then click **Next**.
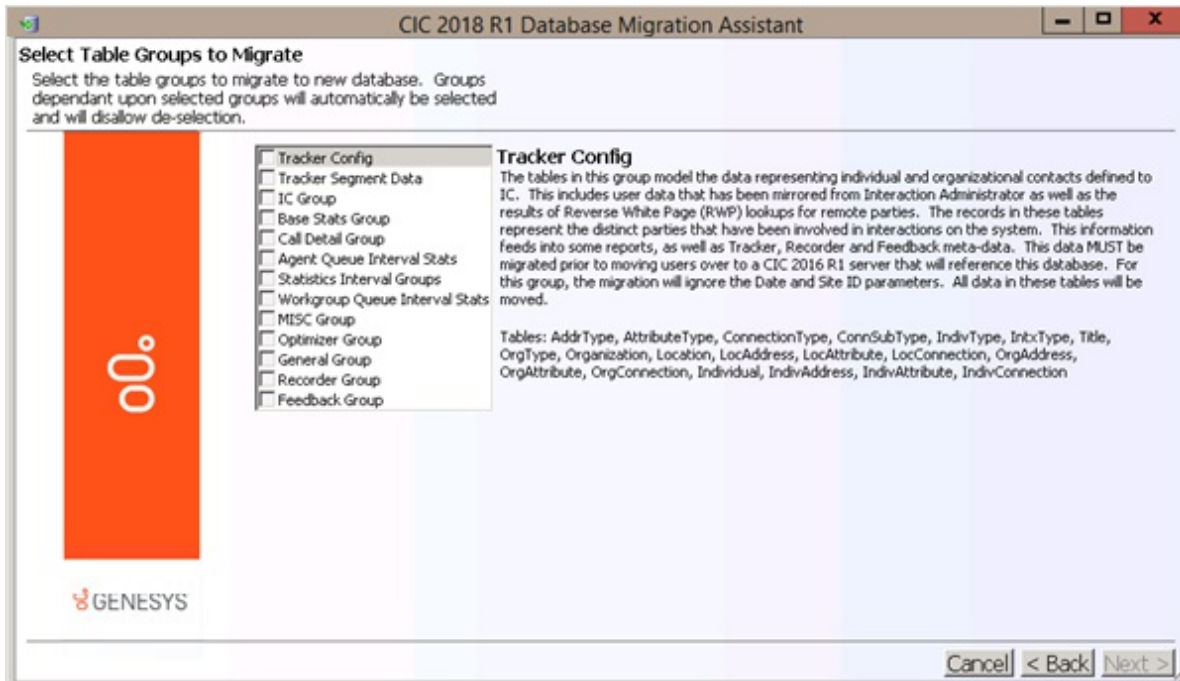
On a first migration run, the **Delete Existing Tracker Data** check box appears. To delete the Tracker tables, select **Delete Existing Tracker Data**. The migration assistant deletes the following Tracker tables in the order shown:

- INDIVCONNECTION
- INDIVIDUAL
- LOCATION
- ORGANIZATION
- ADDRTYPE
- ATTRIBUTETYPE
- CONNECTIONTYPE
- CONNSUBTYPE
- INDIVTYPE
- INTXTYPE
- ORGTYPE
- TITLE

> **Notes:**
> - At a minimum, you must *migrate the Tracker Configuration table group before running Interaction Migrator*. If you import data before migrating this table group, the result is duplicate entries with different ID keys, and historical reports that don't run correctly.
> - The CIC Database Assistant does not delete the `INTX_PARTICIPANT` and `INTXSEGMENT` tables. It is important to note that if any data exists in these two tables, the system doesn't delete the data from any of the Tracker tables. This precaution exists to preserve live 2015 R1 or later production data.
>   If your 4.0 system is in production, but not live, and you choose to delete all Tracker data, complete the following steps in order:
>   1. Delete all data from INTX_PARTICIPANT
>   2. Delete all data from INTXSEGMENT
>   3. Select the **Delete Existing Tracker Data** check box
> - If you click a table group to select it, information about that table group appears to the right.
> - When you select a table group with interdependencies, the system selects the interdependent table groups and makes them unavailable so that you cannot clear them.
> - For SQL Server, if a CIC 2015 R1 or later table is empty, the migration process for that table goes much faster for several reasons. First, CIC Database Migration Assistant does not have to ensure that the rows in the 3.0 table are not in the 2015 R1 or later table. Second, the non-clustered indexes are disabled, which allows for a much faster insert. Third, if using bulk logging or simple recovery mode, there are fewer writes to the log.

12. If you updated the Tracker Configuration data in CIC 3.0 after your initial migration of the Tracker Configuration group, the **Tracker Difference Report** page appears. In the **Table Name** box, click a table, select the records to migrate the CIC 3.0 changes to CIC 2015 R1 or later, and then click **Next**.
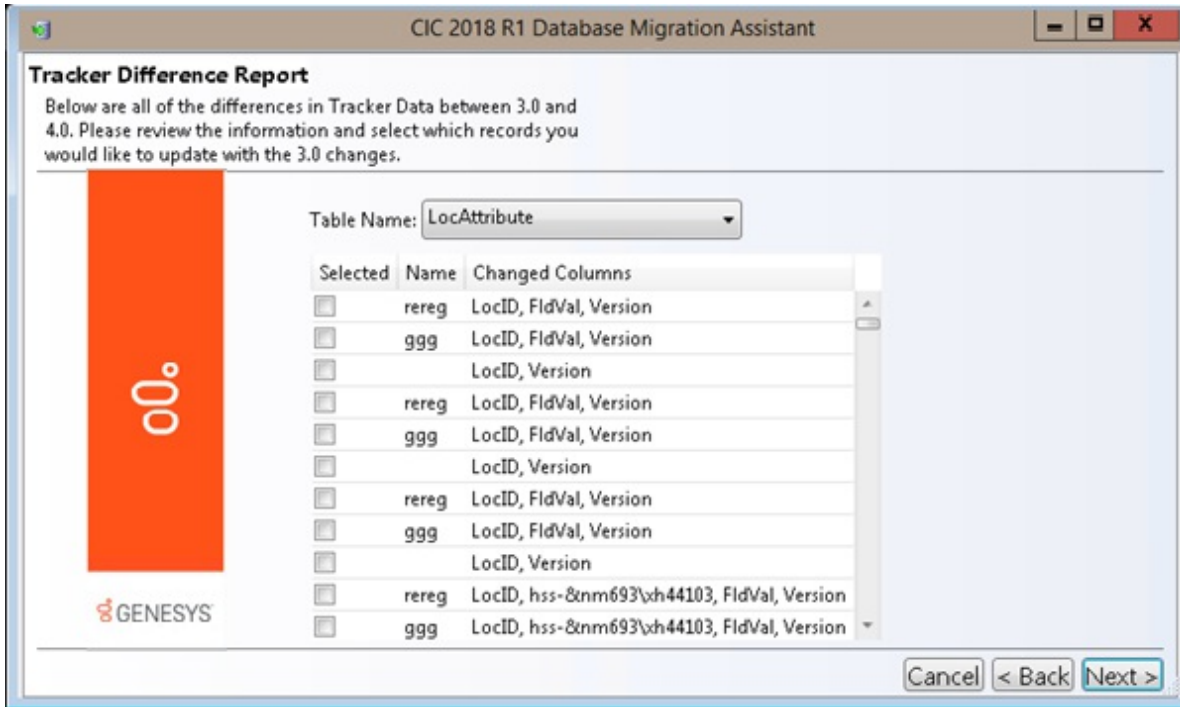
Notes:

- New Tracker Configuration data is migrated on subsequent migrations even if the items are not selected on the **Tracker Difference Report** page. (Items only appear if existing information was changed.) Existing Tracker Configuration data that was changed is migrated on subsequent migrations only if the item is selected on the **Tracker Difference Report** page.
- In the **Name** column, the system attempts to display the following, depending on what data is available:
  LastName, FirstName
  FirstName or LastName
  ICUserID
  IndivID

13. On the **Data Filter Settings** page, to limit the migration by date range, site ID, or both, provide the migration parameters and then click **Next**.
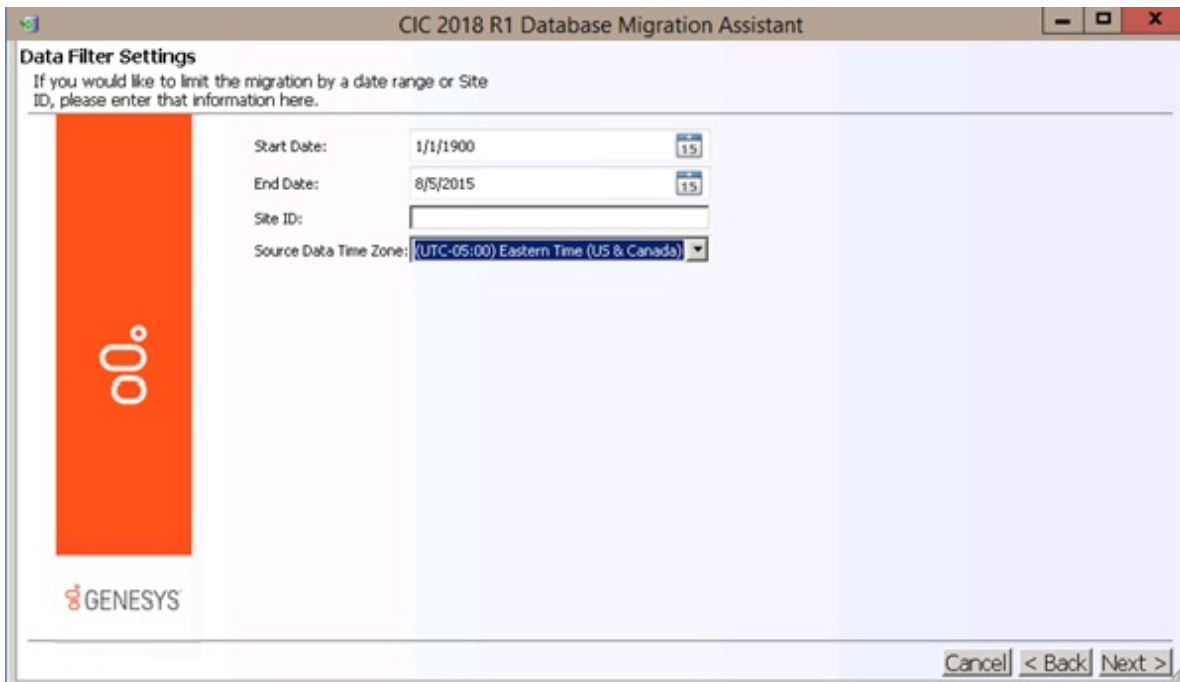
Start Date: Start date to limit the database records to migrate.

End Date: End data to limit the database records to migrate.

> **Note:** All records inserted after 00:00 UTC on the start date and before 24:00 UTC on the end date migrate. You cannot include the current date in the date range.

Site ID: Site ID of the CIC 3.0 server to migrate. If you have multiple CIC 3.0 databases you are migrating to a single CIC 4.0 database, you can use this parameter to migrate one CIC 3.0 database at a time.

> **Note:** If left blank, all records migrate.

Source Data Time Zone: Time zone for the source data. The migration process uses this time zone to populate UTC fields that exist in several table groups in CIC 4.0, but not in CIC 2.4/3.0.

> **Note:** Because the CIC server uses Windows time zone information to create look-up tables, users in the following time zones need to run the appropriate Windows update found on the Windows support site at http://support.microsoft.com/kb/2657025:
> - Samoa Standard Time
> - Russian Standard Time
> - Ekaterinburg Standard Time
> - N. Central Asia Standard Time
> - North Asia Standard Time
> - North Asia East Standard Time
> - Yakutsk Standard Time
> - Vladivostok Standard Time
> - Magadan Standard Time
> - Kaliningrad Standard Time

> **Notes:**
> - If you specify parameters when migrating the Tracker Configuration table group, the system ignores the parameters and migrates all Tracker Configuration tables in the group for all site IDs.
> - The script generation process can take several minutes depending on the number of scripts it creates.
> - CIC Database Migration Assistant deletes data in the following tables from the 2015 R1 or later database each time you run CIC Database Migration Assistant, unless you are limiting the migration by site ID:
>   - `LineConfig`
>   - `LineGroupConfig`
>   - `LineGroupLines`
>   - `UserWorkGroups`
>   - `AccountCodeMirror`
>   These tables only include current activity as reflected in Interaction Administrator; they don't include historical data. So, CIC Database Migration Assistant deletes any CIC 3.0 data migrated to CIC 2015 R1 or later previously before migrating CIC 3.0 data again. If you limit the migration by site ID and the CIC 3.0 and CIC 2015 R1 or later systems use different site IDs, CIC Database Migration Assistant doesn't delete the CIC 2015 R1 or later data. If you don't specify a site ID, CIC Database Migration Assistant deletes all CIC 3.0 records from the CIC 2015 R1 or later database. The process identifies the distinct site IDs in the CIC 3.0 database for each table and uses those values to delete the CIC 3.0 records from the CIC 4.0 database tables.
> - CIC Database Migration Assistant runs a script after the migration to clean up duplicate user values. Duplicate user values typically indicate that the 4.0 database had data existing in the tables before the migration took place.

9. On the **Preview Scripts** page, choose one of the following methods for previewing the scripts before you run them:
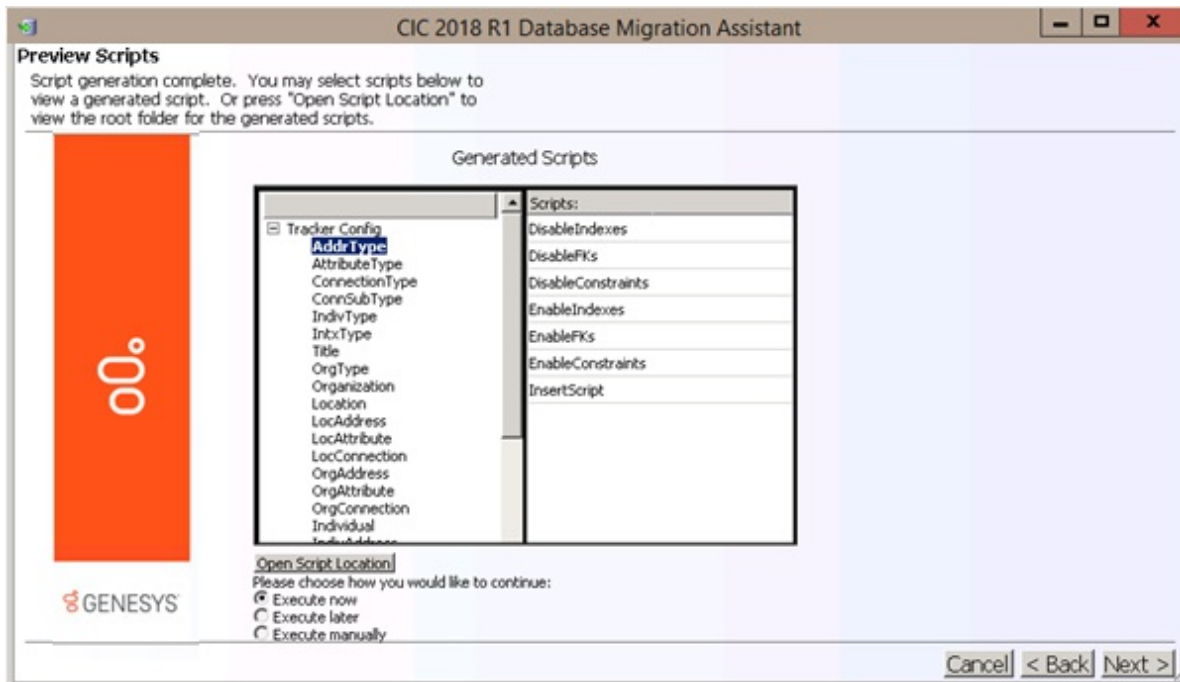
a. In the left column, click a table group to expand it and then click a table to display its scripts in the right column.

b. In the right column, double-click a script to view its contents. The script displays in your chosen text editor.

c. Click **X** in the upper right corner of the window to close it.

-OR-

a. On the **Preview Scripts** page, click **Open Script Location**.
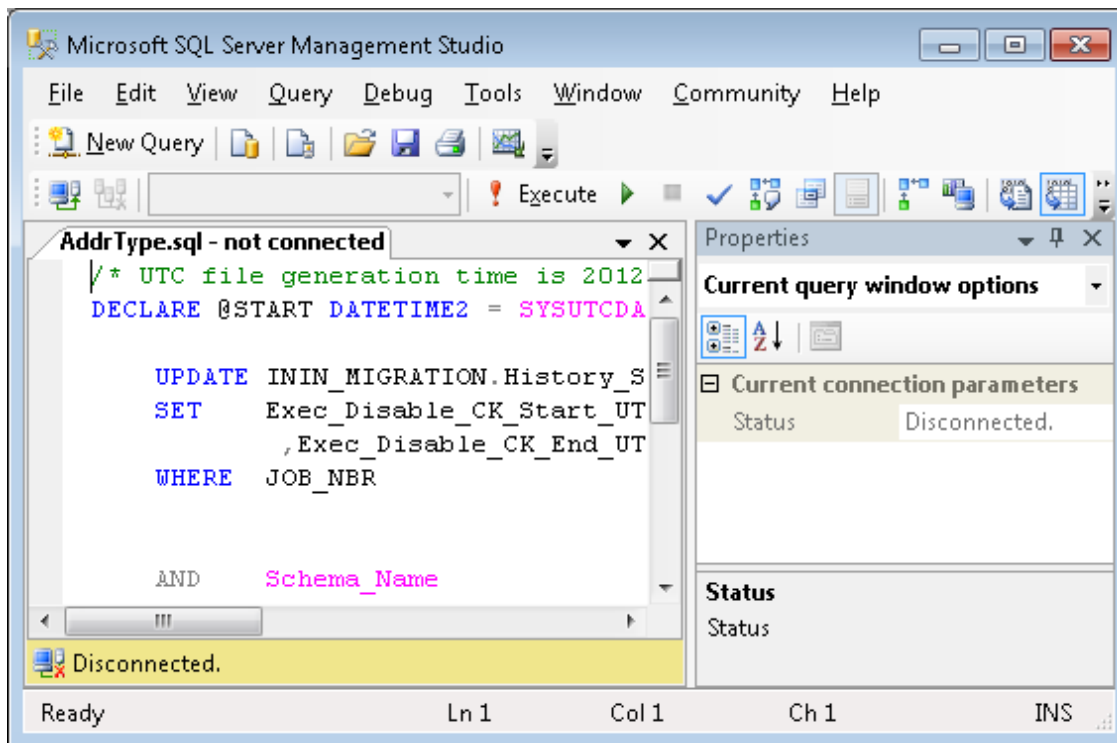
b. Drill down to the script you want to view and click a single script to select it. The script appears in the right pane.

c. To open the script, double-click the script in the left column. The script displays in your chosen text editor.
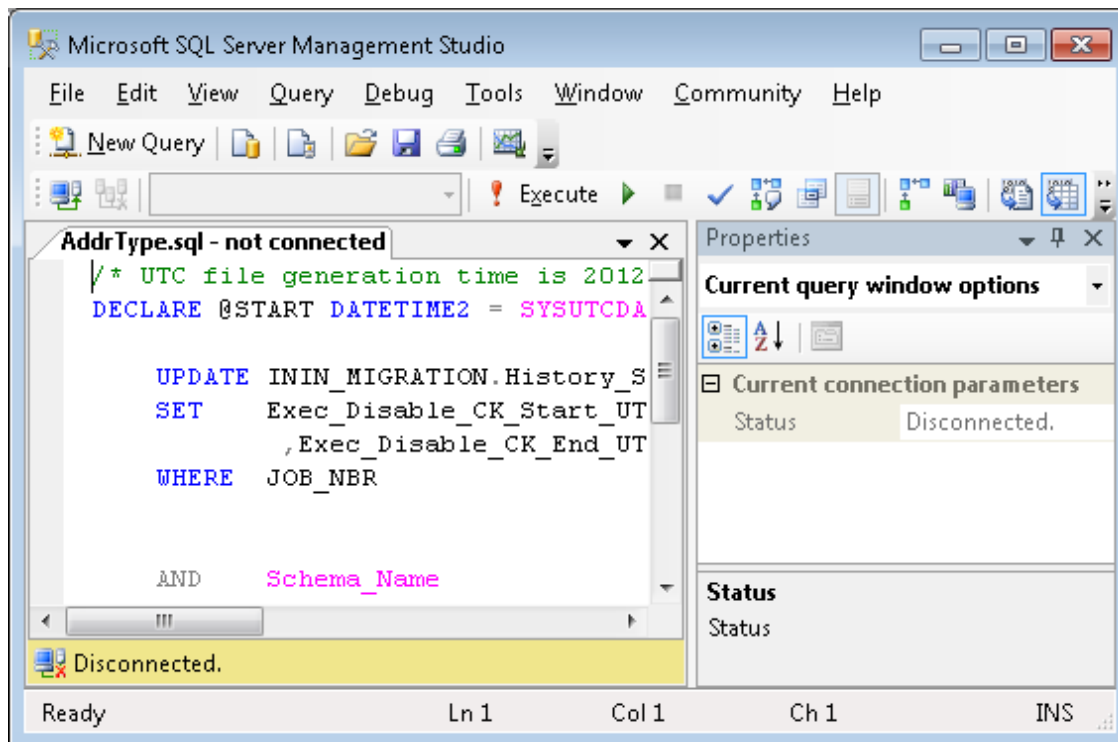
d. Click **X** in the upper right corner of the dialog box to close it.

10. On the **Preview Scripts** page, select an option for running the scripts.
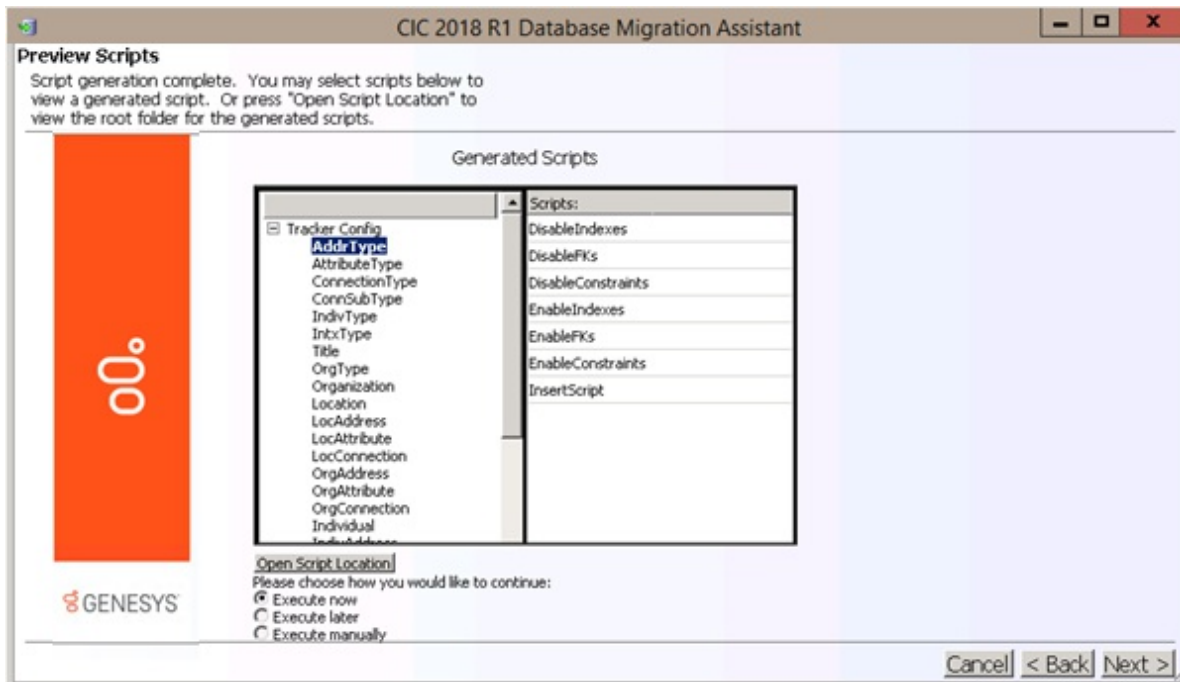
> **Note:** To change parameters before running the scripts, click **Back**. Your changes reflect when the scripts regenerate.

Execute now: If selected, the system runs the scripts after the **CIC Database Migration Assistant Completed** page appears.

Execute later: If selected, the system postpones running the scripts. You can open CIC Database Migration Assistant and select this migration when you are ready for the system to run the scripts.

Execute manually: If selected, you want to run the scripts manually. If you choose this option, it is critical that you run the scripts in a specific order. Genesys does not provide support for running the scripts manually.

11. Click **Next**.
12. On the **CIC Database Migration Assistant Completed** page, one of three things occurs, depending on whether you chose to run the scripts now, later, or manually.

> **Notes:**
> - The amount of time it takes to run the scripts depends on the amount of data migrating. Migration can take anywhere from minutes to hours.
> - You can view the scripts while they running.

Execute now: If you chose **Execute now**, the following page appears:
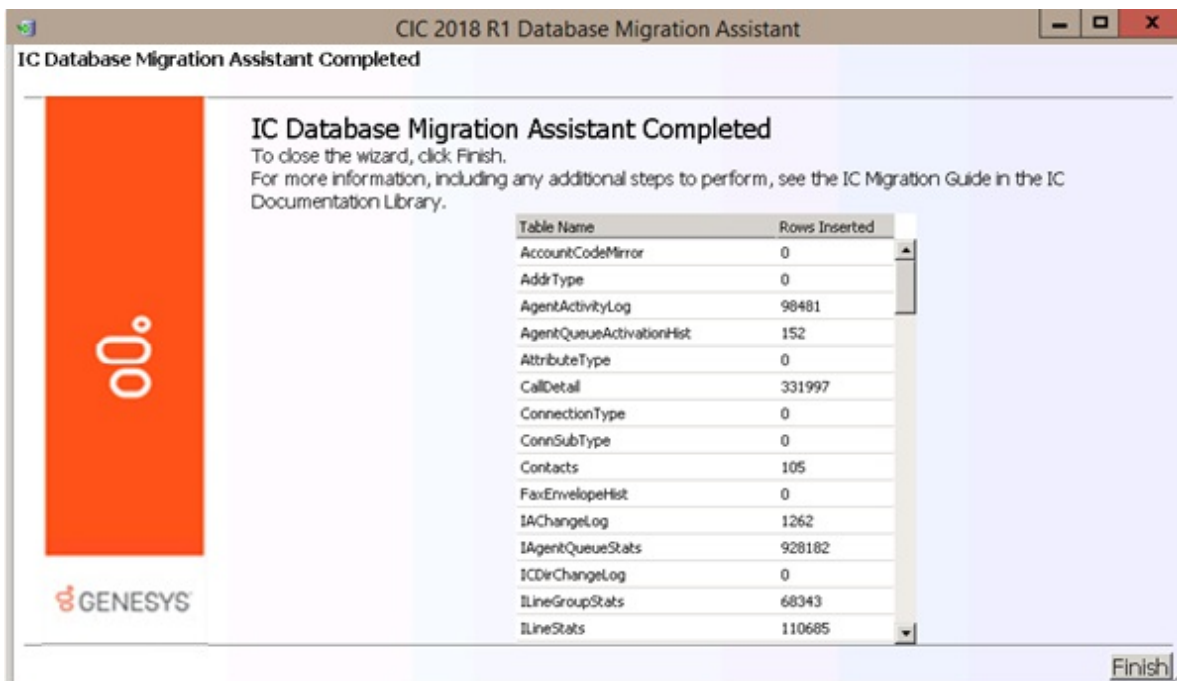
The system begins running the scripts. When completed, click **Finish.** If you are migrating in stages, restart CIC Database Migration Assistant to change settings and generate the next set of scripts.

Execute later: If you chose **Execute later**, the following page appears:
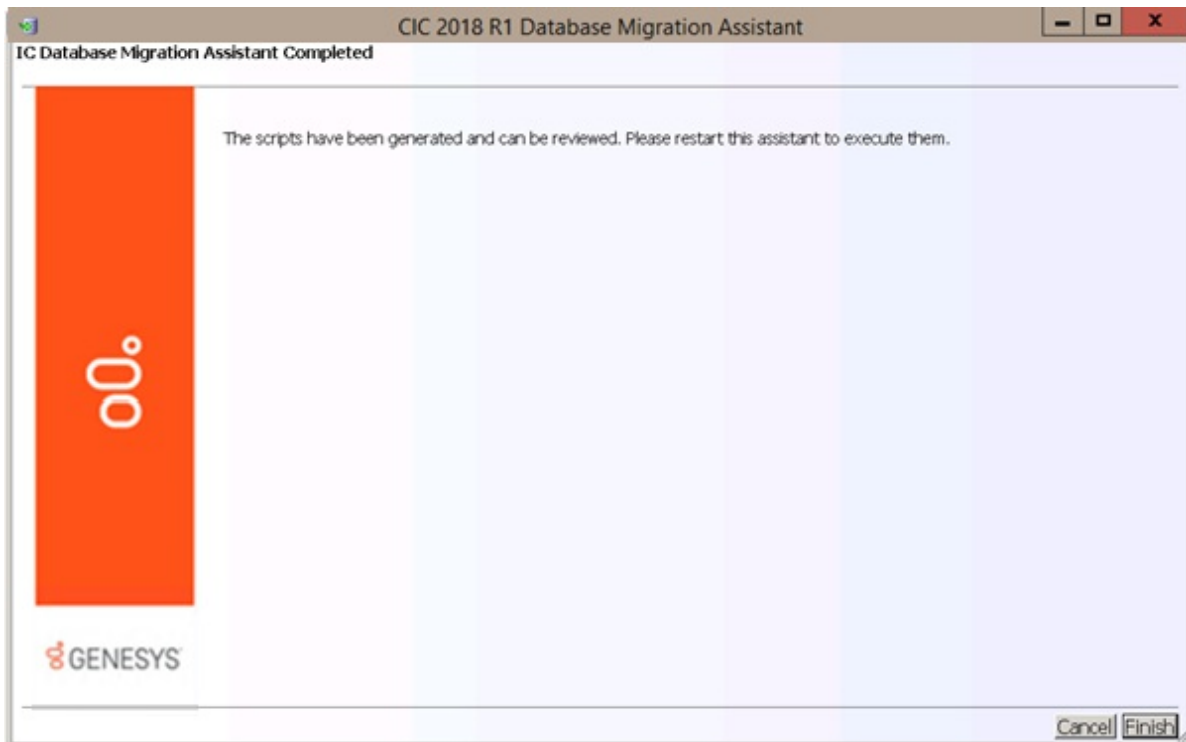
The system saves the scripts so that you can run them at a later time. Click **Finish.** If you are migrating in stages, restart CIC Database Migration Assistant to change settings and generate the next set of scripts.

When you are ready to run the scripts, do the following:

a. Open CIC Database Migration Assistant.
b. On the **Past Migration Utility Executions** page, find the entry with the date and time that matches when you generated the scripts, and with a **Migration Status** of "Ready for restart." Select this entry and then click **Next**. The **Script Generation** page appears.
c. Click **Execute now** and then click **Next**. A message displays indicating that the scripts are running. After the scripts run, click **Finish**.

> **Note:** After you click **Finish**, CIC Database Migration Assistant zips and encrypts the script files and the configuration files for migration before closing.

Execute manually: If you chose **Execute manually**, the following page appears:
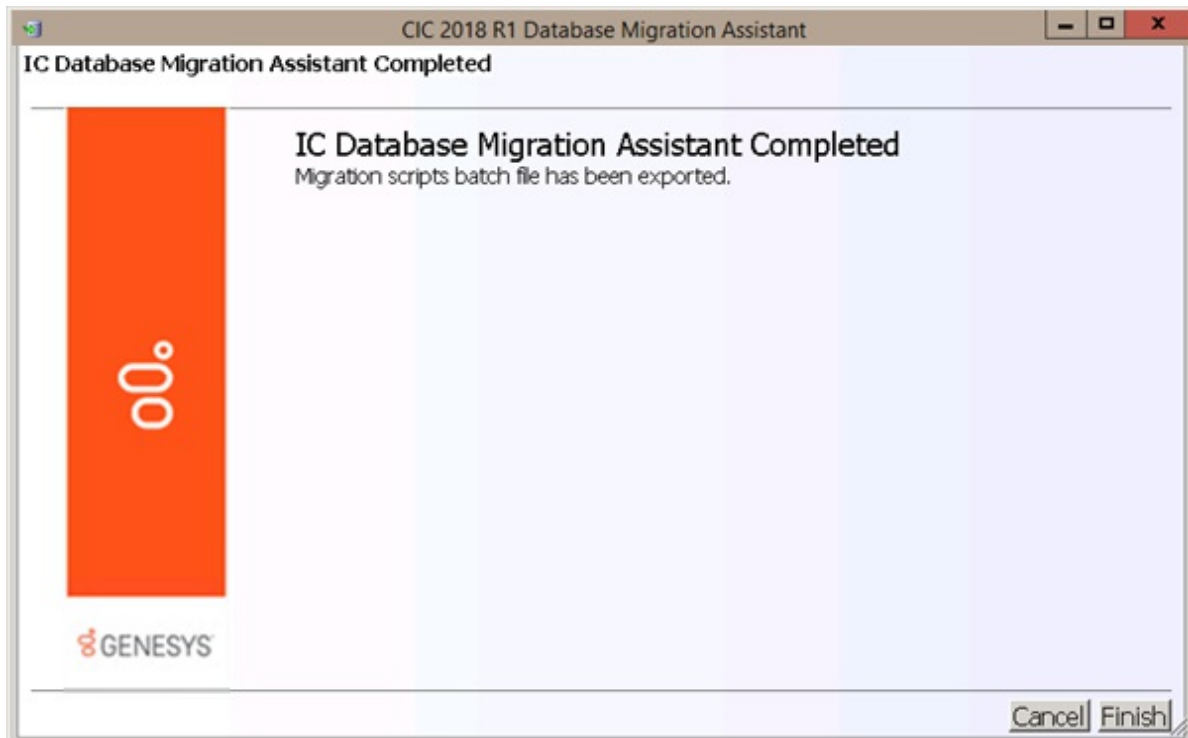
The system saves the scripts and creates a batch file so you can run the scripts manually. The batch file is called `ExecuteMigrationScripts.bat` and is located in the root directory where the scripts are (for example, *%APPDATA%*`\Interactive Intelligence\MigrationUtility\[date_time]`).

> **Warning!**
> If you double-click the batch file or right-click the batch file and then click **Open**, the system **runs** the scripts.

You can use the batch file in two ways:

- **For manual script execution**. You can use it to view the order in which to run the scripts and then run the scripts manually using that exact order. It's critical that you run the scripts in the order specified.
  To view the batch file, right-click `ExecuteMigrationScripts.bat` and then click **Edit**.
- **For automated script execution**. To have the system run the scripts, double-click **ExecuteMigrationScripts.bat**.

> **Note:** If a catastrophic failure occurs (for example, power loss) while the migration scripts are running, run the `MigrationCleanup.bat` batch file in the root directory where the scripts are (for example, *%APPDATA%*`\Interactive Intelligence\MigrationUtility\[date_time]`).

13. If you stopped CIC Service, restart it.

Troubleshooting the CIC Database Migration Assistant

Clean up scripts

If an error occurred during the migration, the CIC Database Migration Assistant attempts to run **cleanup scripts** to resolve the issue. The following message displays:
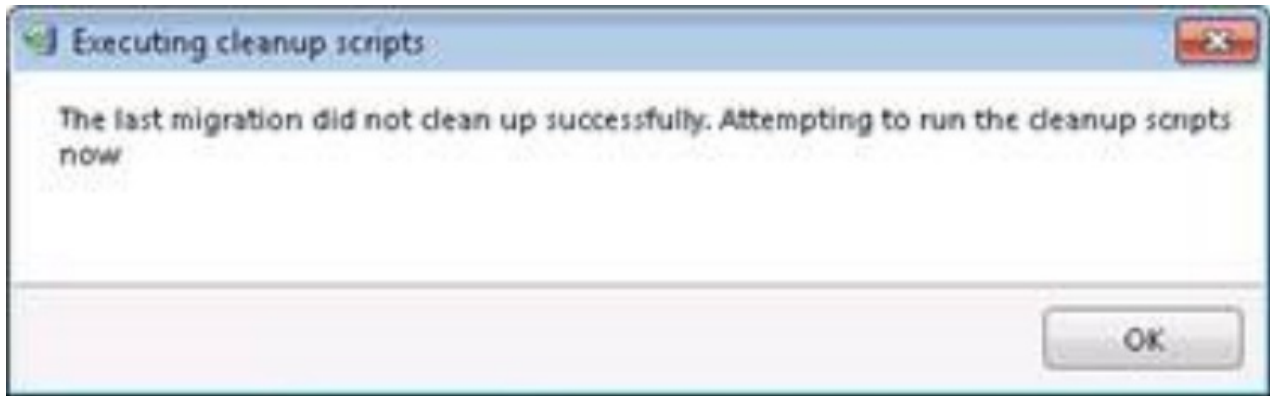
- Do the following:

  a. Click **OK** to run the cleanup scripts.
  b. When the cleanup scripts complete without error, restart CIC Database Migration Assistant.

  > **Note:** If the **cleanup scripts fail to run**, or if the system asks you to run the cleanup scripts again after the restart, an issue exists within the database that you must correct manually. Contact PureConnect Customer Care and provide the CIC Database Migration Assistant logs from all available executions.

Troubleshooting database table groups and table migration

When running the CIC Database Migration Assistant, it's possible that the CIC 2015 R1 or later database schema cannot accommodate some source data, causing the migration to fail.

If you encounter a migration failure, you find the offending source data and modify or purge it. For help with troubleshooting, see KB article: https://my.inin.com/Support/Pages/KB-Details.aspx?EntryID=Q134616021600411. The article lists the table groups and tables by which the CIC Database Migration Assistant migrates data, and displays these tables and table groups in the same patterns that CIC Database Migration Assistant follows during a migration. Locate the table group and the failed table, and then expand the relevant section to find problems, causes, and solutions to the failure.

For further assistance, Contact PureConnect Customer Care.

Complete CIC 2015 R1 or later database post-migration procedures

After migrating the CIC 3.0 database to CIC 2015 R1 or later, complete the follow post-migration procedures:
- Run post-migration check script
- Restart purge processes on the CIC 2015 R1 or later server
- Reapply Interaction Recorder Security Policies

Run post-migration check script for CIC

Genesys recommends that you run the `MigrationCheck.sql` script against the CIC 2015 R1 or later database after migration to check for foreign keys, indexes, and constraints that remain disabled after the migration. If the migration disabled any objects, re-enable them before proceeding and before using the database with a production CIC system. If you cannot re-enable an object, such as a foreign key, because of bad data, do one of the following to fix the data problem:
- **For SQL Server**, run the script located in the SqlServer folder in the CIC Database Migration Assistant installation folder.
- **For Oracle**, run the script located in the Oracle folder in the CIC Database Migration Assistant installation folder.

Restart purge processes on CIC 2015 R1 or later server
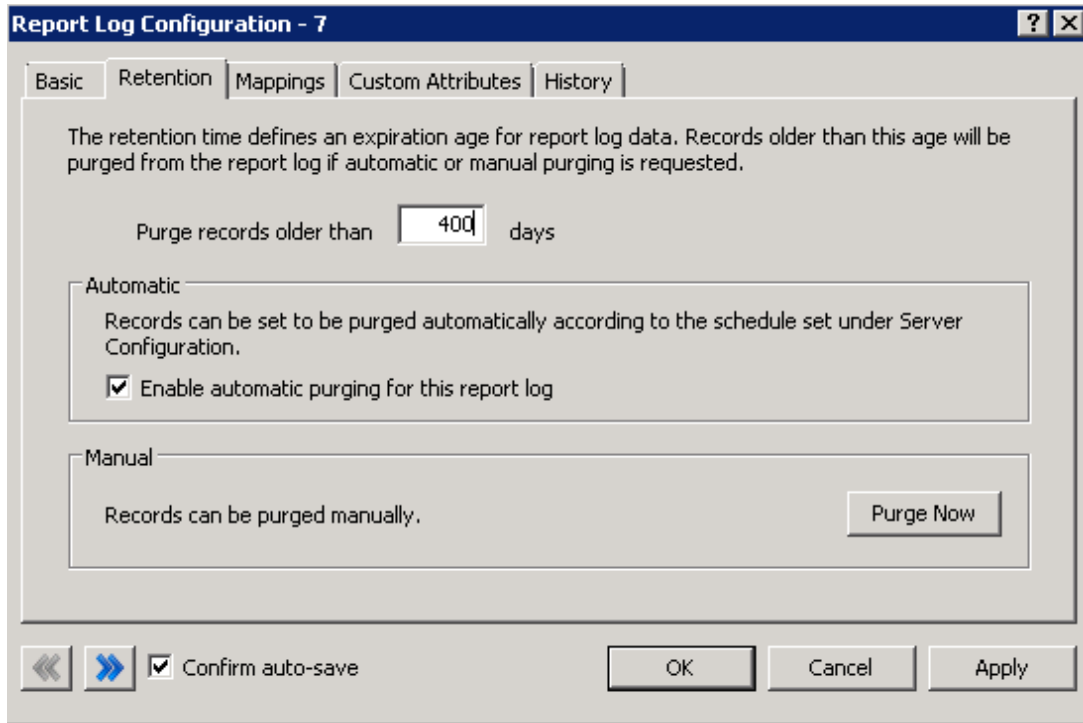
If you stopped the purge process on the CIC 2015 R1 or later server before migrating the database, you can restart it after you finish migrating the database.

Restart Reporting data purging

Complete these steps on the CIC 2015 R1 or later server for each report log (base or custom).

To restart Reporting data purging:

1. In Interaction Administrator, click the **System Configuration** container and then click the **Report Logs subcontainer**.
2. In the right-side pane, double-click a report.
3. In the **Report Log Configuration** dialog box, click the **Retention** tab.
4. On the **Retention** tab, select the **Enable automatic purging for this report log** check box and then click **Apply**.

5. Repeat for all report logs.

Restart Interaction Recorder data purging

If you use Interaction Recorder, restart data purging on the CIC 2015 R1 or later server.

To restart Interaction Recorder data purging:

1. In Interaction Administrator, click the **Interaction Recorder** container and then click the **Policy Editor** subcontainer.
2. In the right-side pane, double-click **Configuration**.
3. In the **Interaction Recorder Policy Editor** dialog box, click the **Retention** tab.
4. On the **Retention** tab, select the check box next to your purge policy and then, in the menu bar, click **Apply**.
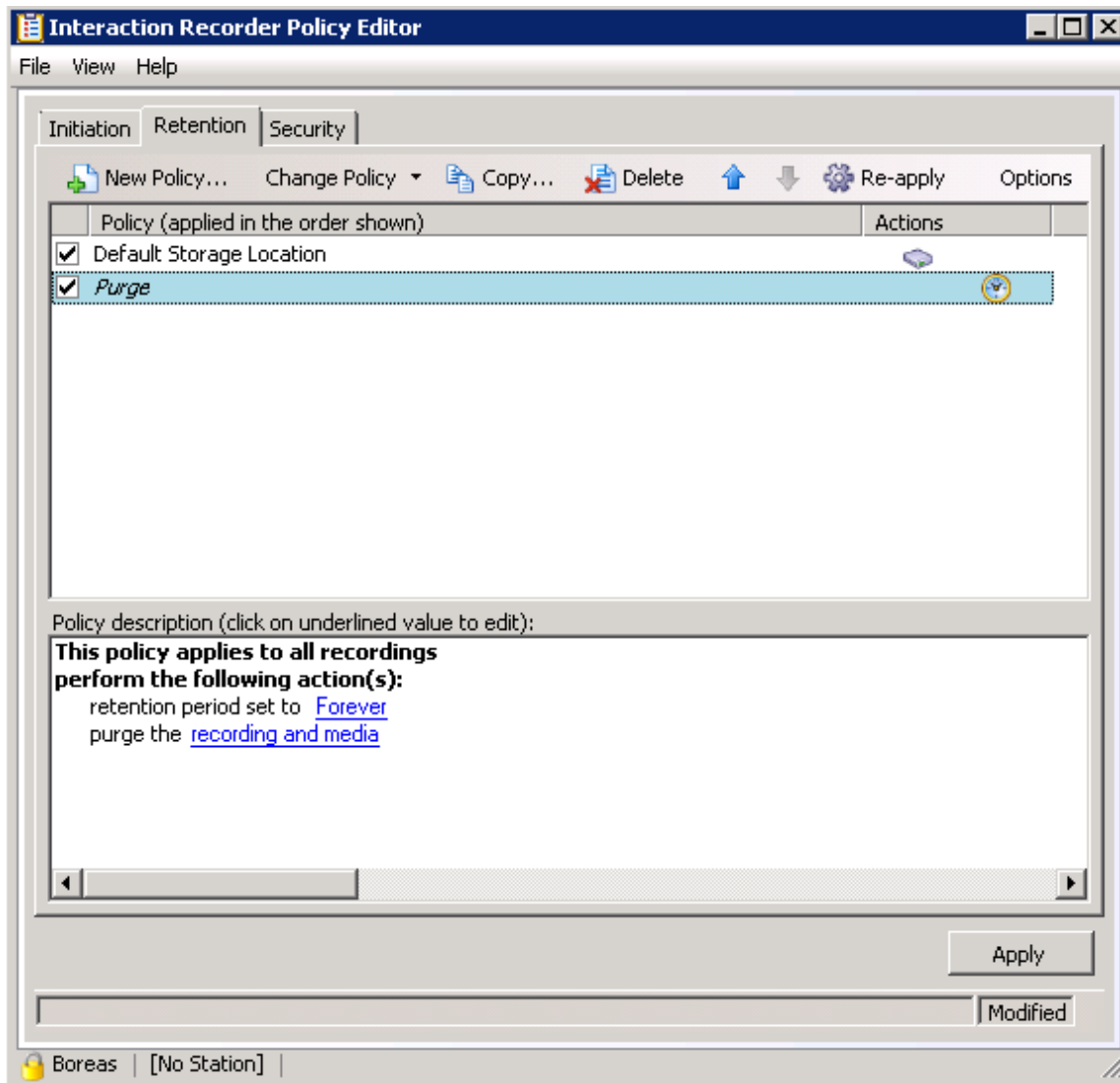
5. In the **Re-apply retention policies** dialog box, click **Re-apply to all recordings** and then click **OK**.
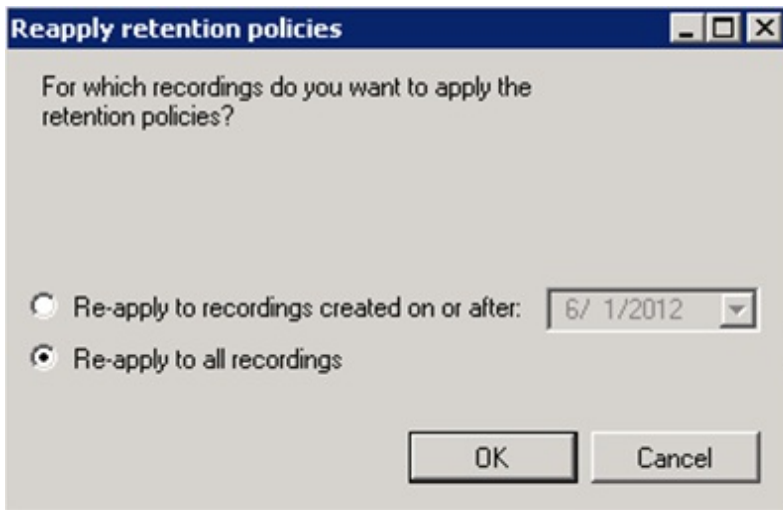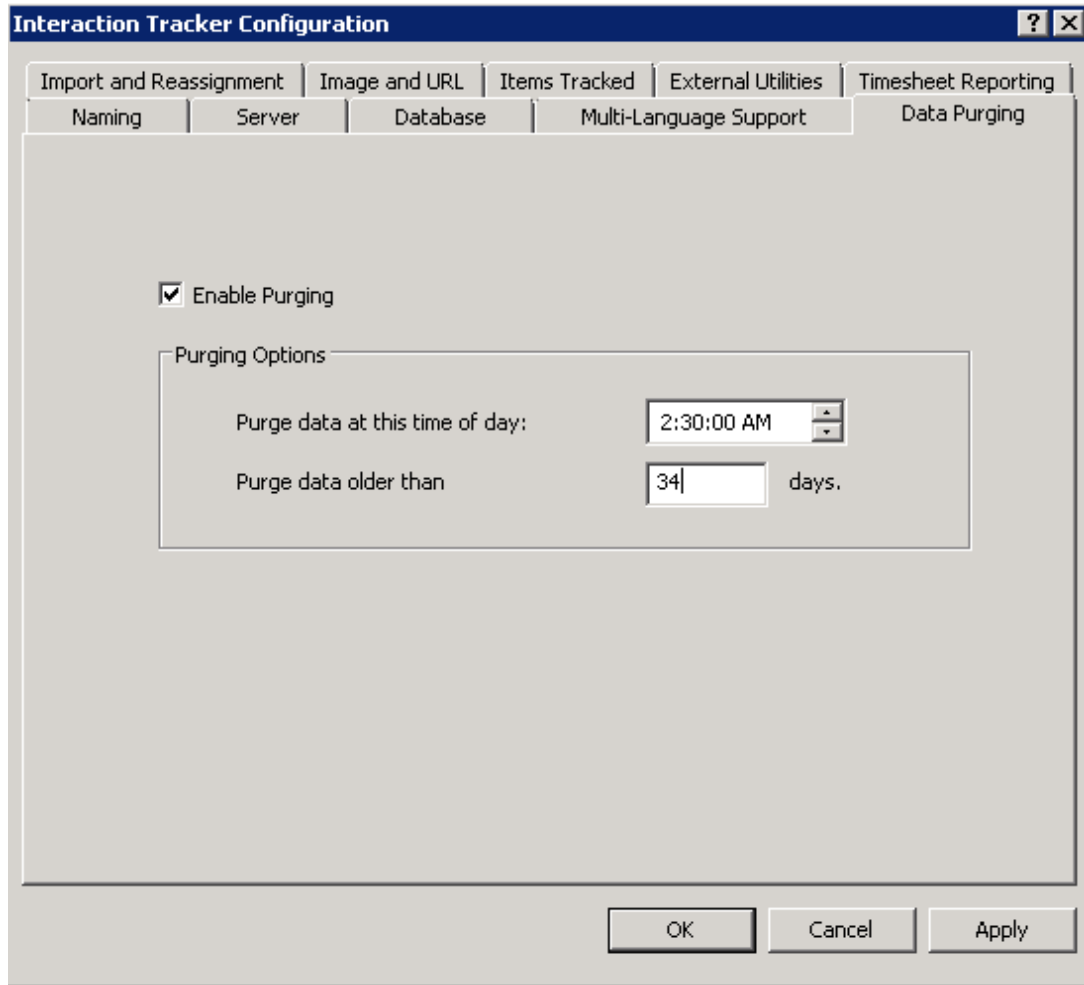
Restart Interaction Tracker data purging

Complete these steps on the CIC 2015 R1 or later server.

To restart Interaction Tracker data purging:
1. In Interaction Administrator, click the **Interaction Tracker** container.
2. In the right-side pane, double-click **Configuration**.
3. In the **Interaction Tracker Configuration** dialog box, click the **Data Purging** tab.
4. On the **Data Purging** tab, select the **Enable Purging** check box and then click **OK**.

Reapply Interaction Recorder Security Policies

If you use Interaction Recorder, reapply your company's security policy manually and restart Interaction Recorder to ensure that recordings appear in CIC.

To reapply Interaction Recorder Security Policies:
1. In **Interaction Administrator**, click the **Interaction Recorder** container and then click the **Policy Editor** subcontainer.
2. In the right-side pane, double-click **Configuration**.
3. In the **Interaction Recorder Policy Editor** dialog box, click the **Security** tab.
4. On the **Security** tab, clear the check box next to the applied security policy to de-activate the policy, and then click **Apply**.
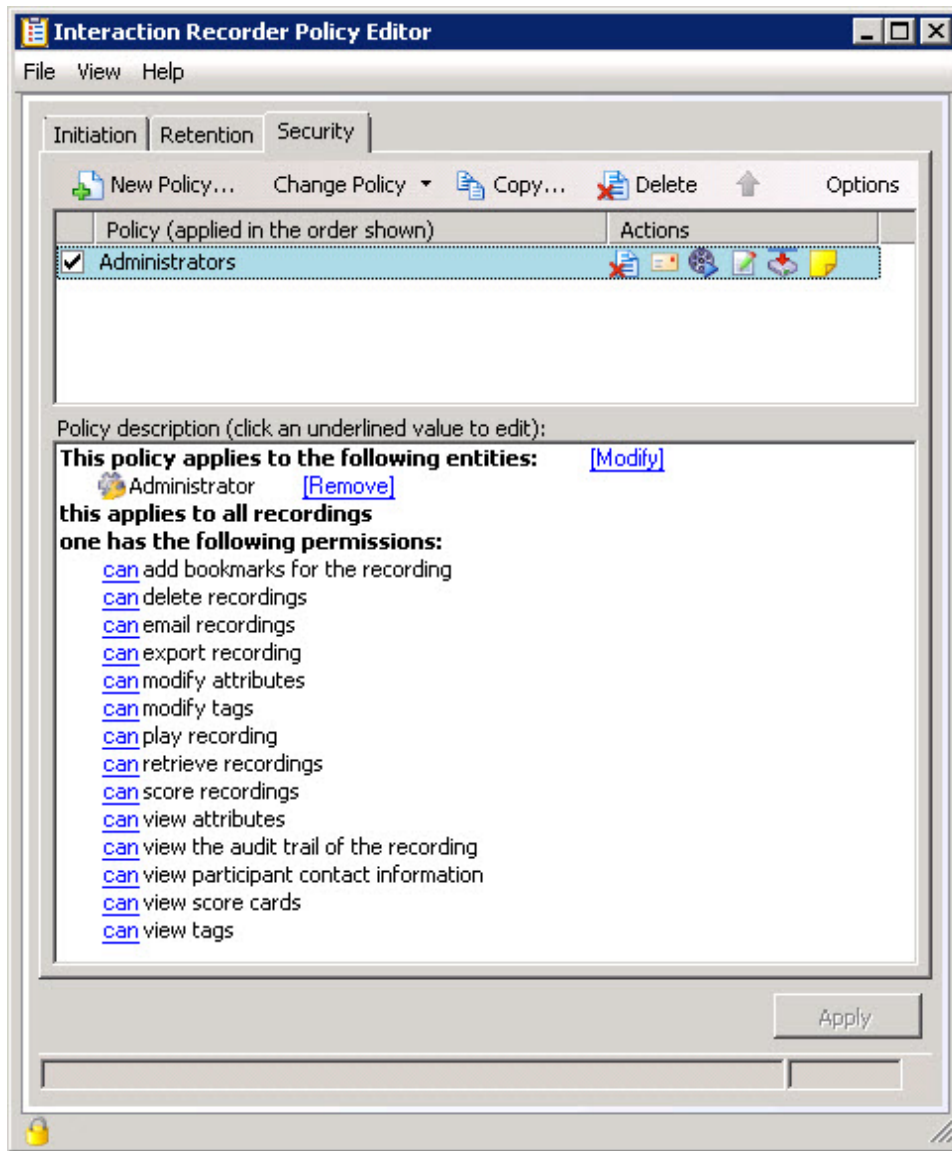
5. Select the check box next to the applied security policy to activate the policy, and then click **Apply**.
6. Close **Interaction Administrator Policy Editor** and **Interaction Administrator**.
7. Start IC System Manager, right-click the **Recorder Server** subsystem, and then click **Restart Subsystem**.

Subsystem	S...	Status	Startup Type	PID	Elapsed Time	CPU Us...	Memory Usage
⬆ Client Services	19	Started	Automatic	3340	4 days, 12 hours, 9 minutes, 48 seconds	0	28912
⬆ Feedback Server	20	Started	Automatic	3864	4 days, 12 hours, 9 minutes, 44 seconds	0	36792
⬆ Optimizer Server	21	Started	Automatic	8112	4 days, 12 hours, 9 minutes, 40 seconds	0	44516
⬆ Recorder Server	22	Started	Automatic	5340	4 days, 12 hours, 9 minutes, 35 seconds	0	38964
⬆ Tracker Server	23	Started	Automatic	7060	4 days, 12 hours, 9 minutes, 32 seconds	0	45904
⬆ AcdServer	24	Started	Automatic	7716	4 days, 12 hours, 9 minutes, 27 seconds	0	25908
⬆ OutOfProcCustom...	25	Started	Automatic	6648	4 days, 12 hours, 9 minutes, 25 seconds	0	17192
⬆ QueueStatProvider	26	Started	Automatic	7212	4 days, 12 hours, 9 minutes, 22 seconds	0	21344
⬆ Session Manager	27	Started	Automatic	8860	4 days, 12 hours, 9 minutes, 19 seconds	0	85212
⬆ TsServer	28	Started	Automatic	3708	4 days, 12 hours, 9 minutes, 12 seconds	0	74516
⬆ FaxServer	29	Started	Automatic	8528	4 days, 12 hours, 9 minutes, 6 seconds	0	30992
⬆ IpServer	30	Started	Automatic	5668	4 days, 12 hours, 9 minutes, 3 seconds	0	24084
⬆ SMSServer	31	Started	Automatic	6268	4 days, 12 hours, 9 minutes, 0 seconds	0	24888
⬆ StatAlertServer	32	Started	Automatic	4012	4 days, 12 hours, 8 minutes, 56 seconds	0	41764
⬆ StatServer	33	Started	Automatic	3664	4 days, 12 hours, 8 minutes, 48 seconds	0	32400
⬆ WebProcessor	34	Started	Automatic	4328	4 days, 12 hours, 8 minutes, 44 seconds	0	40196

Ready | All Subsystems Polling Disabled | Recorder Server Polling Disabled

8. Click **Yes**. The subsystem restarts.

Prepare for Interaction Dialer Database Migration

This section is for Interaction Dialer sites only. It describes the procedures to complete before migrating an Interaction Dialer 2.4/3.0 database to an Interaction Dialer 4.0 database using CIC Database Migration Assistant for Dialer. **At this point in the migration process, you should have migrated the CIC database**.

Prepare the CIC Database Migration Assistant client computer for the Dialer database migration

This section describes how to prepare the CIC Database Migration Assistant client computer for the Dialer database migration.

Copy the UDL folder and Dialer configuration file to the CIC Database Migration Assistant client computer

1. Copy the UDL folder and the Dialer configuration file (`dialer_config.xml`) from the 2.4/3.0 CIC server.
2. Paste the UDL folder and Dialer configuration file in the same folder on the CIC Database Migration Assistant client computer.

When you run the CIC Database Migration Assistant for Dialer, it asks you to browse to the Dialer configuration file and assumes the UDL files exist in the same directory or a `/UDL` subdirectory.

> **Note:** Genesys recommends copying these files directly from the 2.4/3.0 CIC server to the CIC Database Assistant client computer, rather than using a network share.

Configure Oracle TNS names/Net Service names on the CIC Database Migration Assistant client computer

If you are migrating an Interaction Dialer Oracle database, note that the CIC Database Migration Assistant does not migrate the Connection Information for Oracle Services. If you select a migrated UDL file in Interaction Administrator and attempt to test the connection, it can result in an error post-migration.

To avoid this error, configure the TNS names on the CIC Database Migration Assistant client computer using one of the following methods:
- Copy TNS names entries from `TNSNAMES.ORA` on the 2.4/3.0 CIC server to `TNSNAMES.ORA` on the CIC Database Migration Assistant client computer manually.
  -OR-
- Use Oracle NetManager on the CIC Database Migration Assistant client computer to configure the same Net Service Names that the UDL files use on the 2.4/3.0 CIC server.

> **Important!**
> Complete the same procedure on the 4.0 CIC server.

Upgrade the Interaction Dialer 2015 R1 or later database schema

You upgraded the Interaction Dialer 2015 R1 or later database schema when you upgraded the CIC 2015 R1 or later database schema, as described in Prepare for CIC Database Migration, using the CIC Database Script Execution Tools (SQL Server) or when you ran the individual database upgrade scripts (Oracle) manually.

Prepare the Interaction Dialer 2.4/3.0 and Interaction Dialer 2015 R1 or later databases

This section describes how to prepare the Interaction Dialer 2.4/3.0 and Interaction Dialer 2015 R1 or later databases for the migration.

SQL Server pre-migration procedures for Dialer

Modify the recovery mode for SQL Server

If you are migrating a SQL Server database, modify the recovery mode to increase the performance of the migration and reduce disk space requirements. SQL Server has three recovery modes: Full, Simple, and Bulk Logged. By default, the database uses Full recovery mode. Switching to Bulk Logged recovery mode significantly impacts the amount of time required, and the size needed for transaction logs.

To modify the recovery mode for SQL Server:
1. On a first migration run and when the CIC 4.0 database is empty (except for a few rows added to the Tracker tables at install time), delete the Tracker tables.
   > **Note:** You can delete the Tracker tables by selecting the appropriate check box on the **Select Table Groups to Migrate** page in CIC Database Migration Assistant or by running the `Delete_Tables_PreMigration.sql` script located in the `\Scripts` folder in the CIC Database Migration Assistant installation folder.

   The CIC Database Assistant does not delete the `INTX_PARTICIPANT` and `INTXSEGMENT` tables. It is important to note that if any data exists in these two tables, the system doesn't delete the data from any of the Tracker tables. This precaution exists to preserve live 4.0 production data.

   If your 4.0 system is in production, but not live, and you choose to delete all Tracker data, you must complete these steps in the following order:
   a. Delete all data from `INTX_PARTICIPANT`
   b. Delete all data from `INTXSEGMENT`
   c. Select the **Delete Existing Tracker Data** check box or run the `Delete_Tables_PreMigration.sql` script.
2. In Microsoft SQL Server 2008 Management Studio, switch to Bulk Logged recovery mode to take advantage of limited logging.
   > **Note:** Failure to switch to Bulk Logged recovery mode may result in exhausting transaction log disk space.
3. Complete a full backup of the CIC 2015 R1 or later database to have the features associated with the Bulk Logged recovery mode take effect.
4. Proceed with the migration as described in Migrate the CIC 3.0 Database.
5. After migrating the database, switch back to Full recovery mode, or the recovery mode of your choice, and complete a full backup of the CIC 2015 R1 or later database.
   > **Note:** Since changing the recovery mode of the database is something you may not want to do once the database is in production, it is highly recommended that you migrate all the historical data you intend to move before putting the database into production.

Create a SQL Server user

Genesys recommends using the same SQL Server user that you created when you prepared the CIC 2.4/3.0 and CIC 2015 R1 or later databases for the migration, as described in Prepare for CIC Database Migration.

Oracle pre-migration procedures for Interaction Dialer

Set the authentication parameter for Dialer

You set the authentication parameter for Oracle when you prepared the CIC 2.4/3.0 and CIC 2015 R1 or later databases for the migration, as described in Prepare for CIC Database Migration.

Create an Oracle user

Genesys recommends using the same Oracle user that you created when you prepared the CIC 2.4/3.0 and CIC 2015 R1 or later databases for the migration, as described in Prepare for CIC Database Migration.

Configure Oracle TNS names/Net Service names on the CIC server

If you are migrating an Interaction Dialer Oracle database, note that the CIC Database Migration Assistant does not migrate the Connection Information for Oracle Services. If you select a migrated UDL file in Interaction Administrator and attempt to test the connection, it can result in an error post-migration.

To avoid this error, configure the TNS names on the CIC Database Migration Assistant client computer using one of the following methods :

- Copy TNS names entries from `TNSNAMES.ORA` on the 2.4/3.0 CIC server to `TNSNAMES.ORA` on the 4.0 CIC server manually.
  -OR-
- Use Oracle NetManager on the 4.0 CIC server to configure the same Net Service Names used by UDL files on the 2.4/3.0 CIC server.

> **Important!**
> Complete the same procedure on the CIC Database Migration Assistant client computer.

Cross-platform data migration

Prior versions of Interaction Dialer stored historical information about campaigns in the same database as the accompanying contact list. Interaction Dialer 2015 R1 or later stores historical campaign data in the CIC database. Since Interaction Dialer customers may have existing Dialer contact databases on multiple database platforms, the CIC Database Migration Assistant facilitates consolidating the historical information into the unified database.

For instructions on connecting an Oracle database to a SQL Server database, or connecting a SQL Server database to an Oracle database in preparation for running CIC Database Migration Assistant for Dialer, see KB article: https://my.inin.com/Support/Pages/KB-Details.aspx?EntryID=Q136580478100915.

Apply Interaction Dialer ESs

If you are on Interaction Dialer 4.0 SU 1, obtain and apply the appropriate ESs required for the Dialer database migration.

CIC server

- CIC_SU1 (SU1-DIALER-7545)
- CIC_SU1 (SU1-DIALER-7546)
- CIC_SU1 (SU1-DIALER-7697)
- CIC_SU1 (SU1-DIALER-7850)

CIC/ODS 2015 R1 or later server

- ODS_SU1 (SU1-DIALER-7545)
- ODS_SU1 (SU1-DIALER-7546)

Migrate the Interaction Dialer 2.4/3.0 Database

This section provides instructions for migrating a Dialer 2.4/3.0 database to Dialer 2015 R1 or later database using CIC Database Migration Assistant for Dialer. It is critical that you run CIC Database Migration Assistant for CIC first, and then run CIC Database Migration Assistant for Dialer before importing CIC and Dialer configuration data using Interaction Migrator.

Dialer database migration considerations

CIC Database Migration Assistant for Dialer supports Interaction Dialer database migration fully. Best practice recommends that you consider the following:

- **Decide how to handle deleted workflows**. You can purge deleted workflows, or you can retain them for other reasons (for example, you may want to run reports on deleted workflows). To prevent or eliminate deleted workfrows from appearing in CIC Database Migration Assistant, remove them from the dialer_config.xml configuration file. For more information on purging deleted workflows, see "Clean Up Deleted Configuration Objects: in the *Interaction Dialer's Dialer Tools* documentation.

  Note: CIC Database Migration Assistant does not require you to purge deleted workflows before you migrate the database. If you do not purge these workflows, the deleted workflows contain **Yes** in the **Deleted** column on the **Dialer Workflows to Migrate** page.

- **Subdivide migration by workflow.** If you encounter any issues during migration, subdividing the migration by workflows helps PureConnect Customer Care narrow down which workflow contains the migration issue. To subdivide by workflows, use CIC Database Assistant for Dialer to migrate a single workflow, or a select number of workflows. Repeat this process for the remaining workflows, running CIC Database Assistant for Dialer multiple times until you migrate all workflows.
- **Depending on the filters you select, Dialer data might not migrate**. For example, if you select a set of workflows and a date range that don't match. If Dialer data does not migrate, confirm your filter settings and run CIC Database Migration Assistant for Dialer again. If your settings are correct and the data still does not migrate, contact PureConnect Customer Care.
- **Delete workflows that do not contain historical workflow tables**. To avoid an error migrating the dialer database if a workflow does not contain any of the historical workflow tables (for example, the Agent Stats or Call History tables), delete workflows that remain in the configuration file.

Migrate the Dialer 2.4/3.0 database

This section describes how to migrate the Dialer 2.4/3.0 database using CIC Database Migration Assistant for Dialer. Ensure that you are logged on as the same user who ran the CIC Database Migration Assistant to migrate the CIC 3.0 database.

To migrate the Dialer 2.4/3.0 database:

1. Though not required, Genesys recommends that you stop **CIC Service** on the CIC/ODS server to:
   - Ensure that no one adds new data to the Dialer 2.4/3.0 database schema while a migration is occurring.
   - Prevent access to a Dialer ODS 4.0 server during migration so that the migration uses the database server exclusively.

   Note: Depending on how much historical reporting data that you have, it can take a long time to migrate your historical data.

2. Start CIC Database Migration Assistant for Dialer on the CIC Database Migration Assistant client computer from the CIC Database Migration Assistant shortcut on the desktop.

3. On the **Welcome** page, click **Next**.
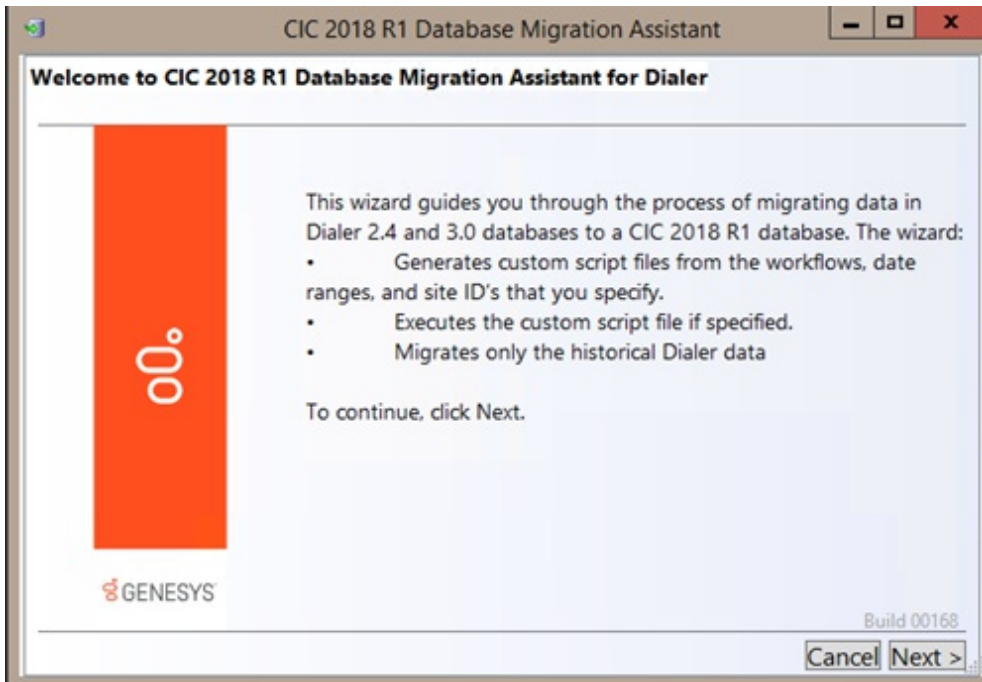
If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.

4. If this isn't your first time running CIC Database Migration Assistant for Dialer, the **Past Migration Utility Executions** page appears. To use settings from a previous migration, or restart a migration to run the scripts, click the migration to run and then click **Next**.
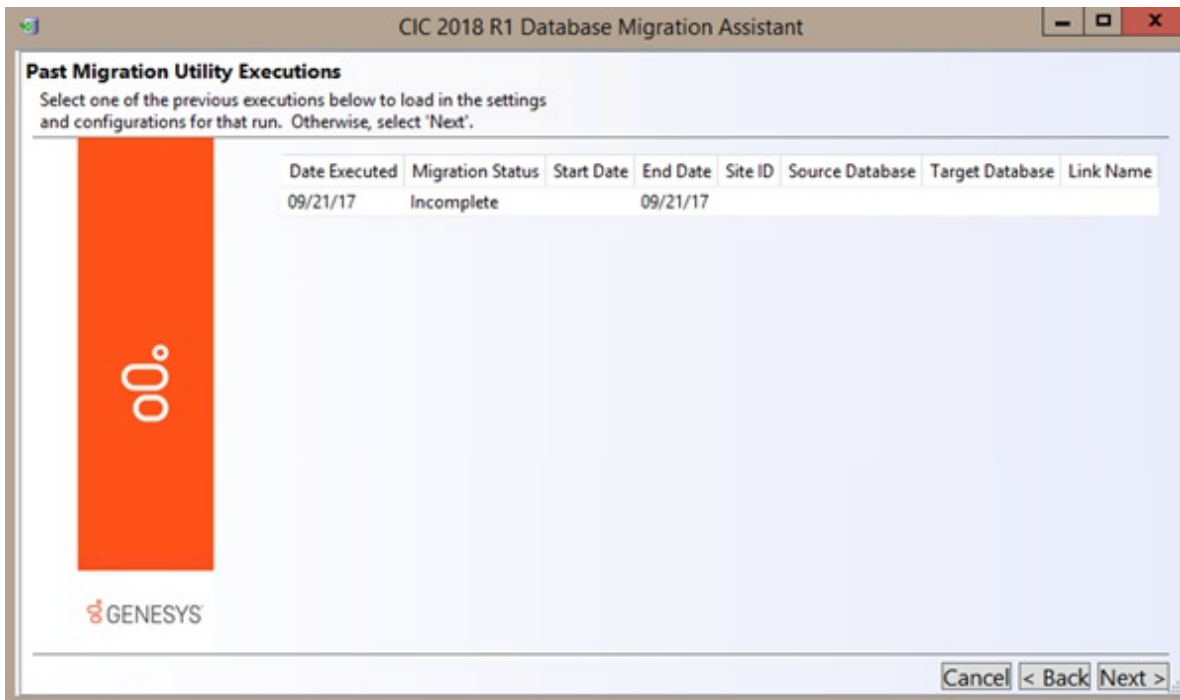
Note: To unselect a migration run, hold down the Ctrl key and click the migration run.

The **Past Migration Utility Execution** page contains settings, configuration, and status details of past migrations.

Date Executed: Date a user opened the CIC Database Migration Assistant for Dialer.

Migration Status: Status of the script execution.

> **Completed:** CIC Database Migration Assistant for Dialer generated and ran the scripts.
>
> **Failed version check:** You attempted to migrate from a Dialer 2.4/3.0 database or to a Dialer 4.0 database version that the currently running version of CIC Database Migration Assistant for Dialer doesn't support.
>
> **Incomplete:** You canceled the migration process before the scripts were generated.
>
> **Ready for restart:** CIC Database Migration Assistant for Dialer generated the scripts but did not run them. You can restart the migration and have CIC Database Migration Assistant for Dialer run the scripts when you are ready.

User completed: CIC Database Migration Assistant for Dialer generated the scripts but did not run them. When you are ready, run the scripts manually.

Start Date: The date the migration run started.

End Date: The date the migration run stopped.

Source Database: The Dialer 2.4/3.0 database to migrate from.

Target Database: The Dialer 4.0 database to migrate to.

Link Name: The name of the link between the Dialer 2.4/3.0 and Dialer 4.0 databases.

5. On the **Database Server Credentials** page, in the **Server Type** drop-down list, select the type of database server you are using (for example SQL Server or Oracle.)
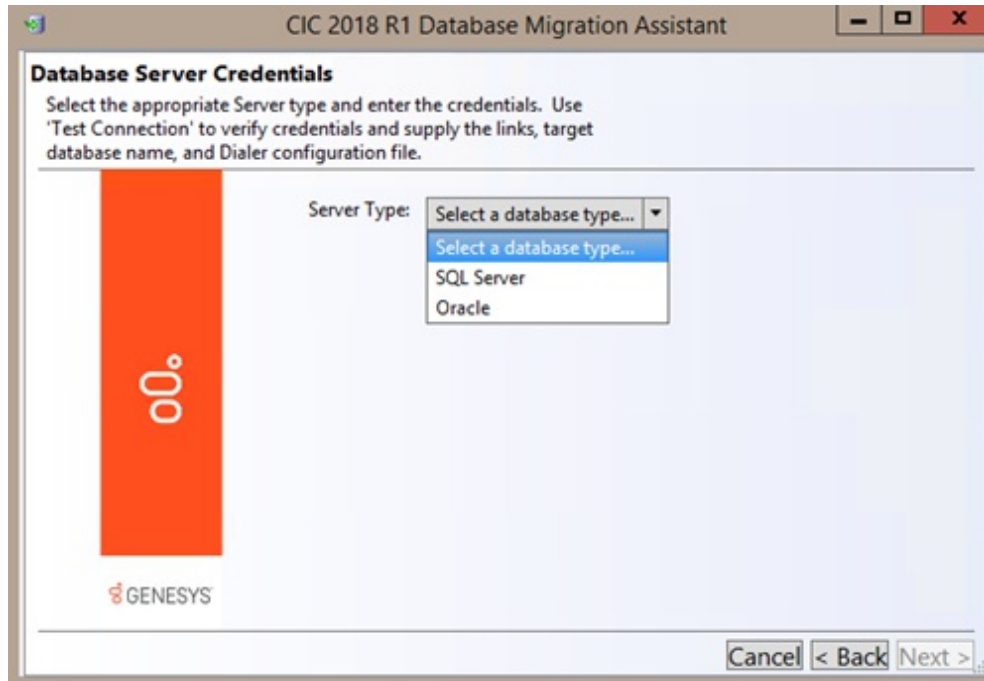
The information that displays differs, depending on the type of server you selected.

6. Provide the requested information for the Dialer 4.0 database server.

> **Note:** The **Status Messages** box lists your selections and the time you selected them.

For SQL Server: Specify the SQL Server information for the Dialer 4.0 database.
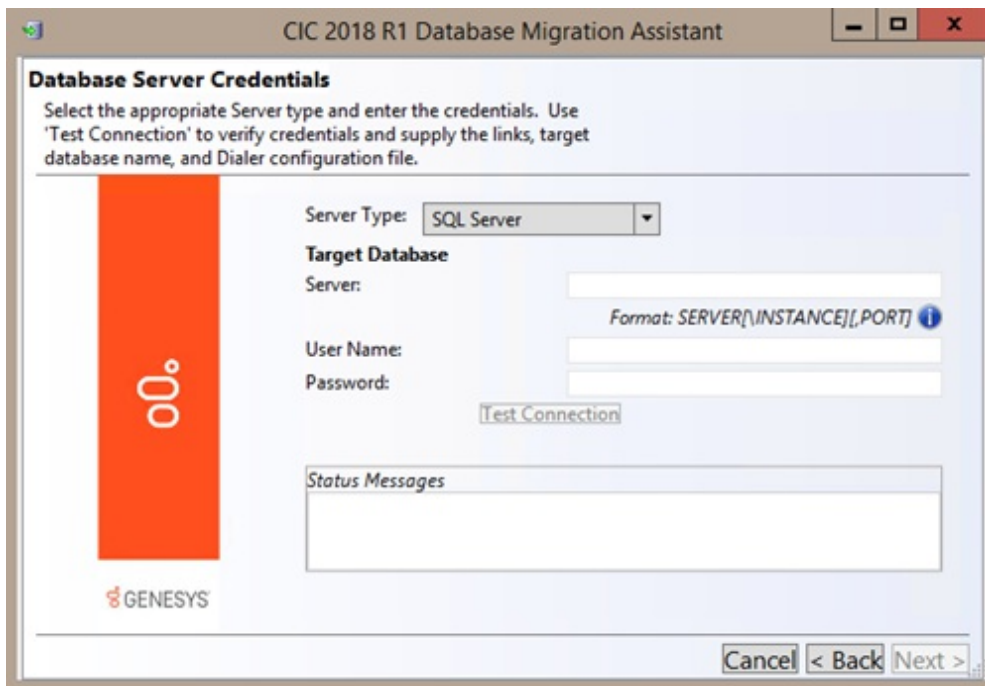
Database Server Credentials

Select the appropriate Server type and enter the credentials. Use 'Test Connection' to verify credentials and supply the links, target database name, and Dialer configuration file.

Server Type: SQL Server

Target Database

Server:

Format: SERVER[\INSTANCE][,PORT] ⓘ

User Name:

Password:

Test Connection

Status Messages

GENESYS

Cancel < Back Next >

Server: Name of the Dialer 4.0 database server. For SQL Server, include the instance and port number of the Dialer 4.0 database. To see an example, click the information icon under the **Server** box.

User Name: User name for logging on to the Dialer 4.0 database server.

Password: Password associated to the user name.

For Oracle: Specify the Oracle information for the Dialer 4.0 database.

Database Server Credentials

Select the appropriate Server type and enter the credentials. Use 'Test Connection' to verify credentials and supply the links, target database name, and Dialer configuration file.

Server Type: Oracle

Target Database

Server:

Port #: 1521

Service Name:

User Name:

Password:

Test Connection

ININ data tablespace:

ININ index tablespace:

Target data tablespace:

Target index tablespace:

Status Messages

13:36:23:	Selected Oracle for database type
13:37:37:	Selected SQL Server for database type
13:37:44:	Selected Oracle for database type

GENESYS

Cancel < Back Next >

Server: Name of the Dialer 4.0 database server. For SQL Server, include the instance and port number of the Dialer 4.0 database. To see an example, click the information icon under the **Server** box.

Port #: Dialer 4.0 database server port number.

Service Name: Name of the service this instance of the Dialer 4.0 database connects to.

User Name: User name for logging on to the Dialer 4.0 database server.

Password: Password associated to the user name.

ININ data tablespace: Tablespace where the data for the `ININ_MIGRATION` schema are.

ININ index tablespace: Tablespace where indexes for the `ININ_MIGRATION` schema are.

Target data tablespace: Tablespace where Dialer 4.0 tables and stored procedures are.

Target index tablespace: Tablespace where Dialer 4.0 indexes are.

> **Note:** If the system cannot locate the UDL file, **UDL Missing** appears in the **Data Source Name** column.
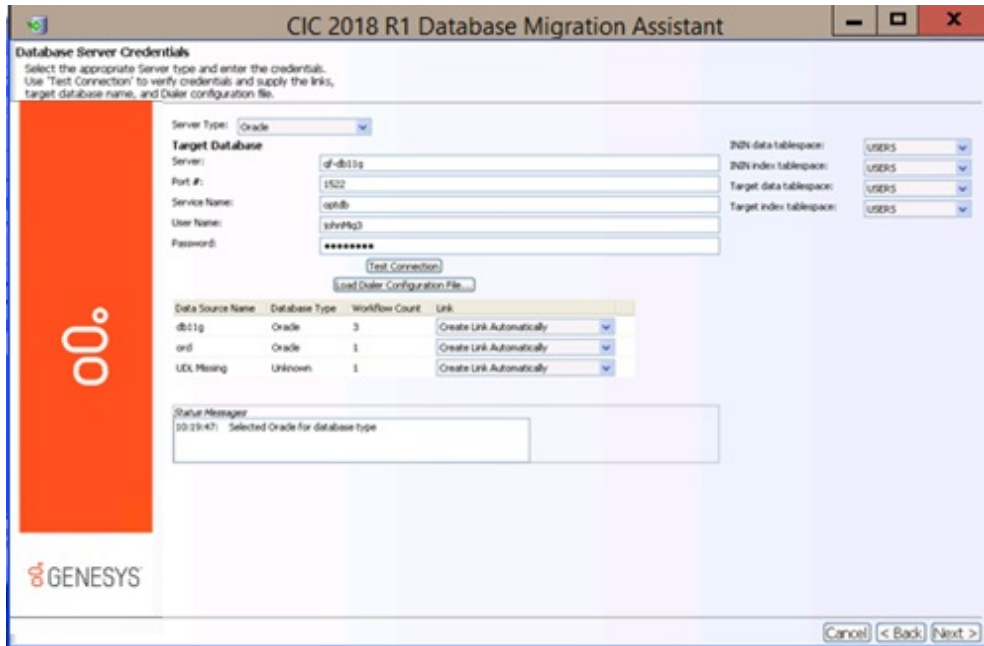
When you click **Next**, the workflows associated to the missing UDL file appear. In the following example, the `testDeleteWorkflow` was contained in a UDL file deleted prior to running CIC Database Migration Assistant for Dialer. Click **Next** to migrate the remaining valid workflows.
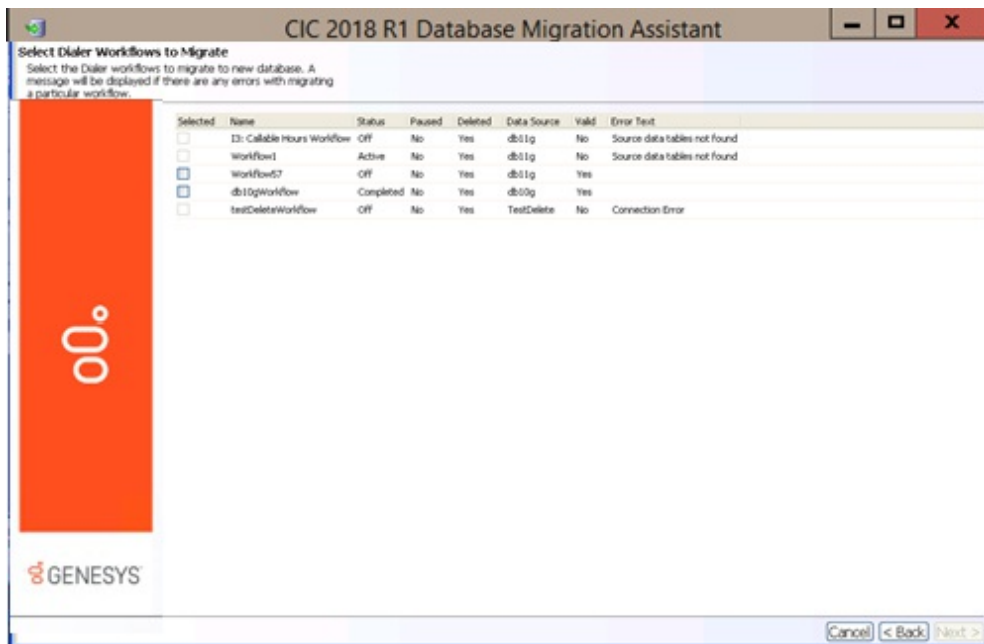
7. After providing the Dialer 2015 R1 or later database server information, click **Test Connection**. The system tests the following:

   - Connection to the Dialer 2015 R1 or later database server. If the connection isn't successful, verify that the information you provided is correct.
   - **(SQL Server only) CREATE LINK** permission. If you don't have this permission, the system displays a message to that effect and makes **Create Link** unavailable.
   - **(Oracle only)** Permission for running a migration. If you don't have this permission, the system displays a message to that effect. Check your permissions or provide credentials for a user who has the permission.
   - **(Oracle only)** Permission to migrate to the selected Dialer 2015 R1 or later database. If you don't have this permission, the system displays a message to that effect. Select a different Dialer 2015 R1 or later database or check your permissions.

8. Click **Load Dialer Configuration File**, navigate to the directory in which `Dialer_config.xml` resides, and double-click the file to include it in the migration.

9. To specify the link to connect one Dialer 2.4/3.0 database to one Dialer 2015 R1 or later database, do one of the following:

- **Use database links you created before running CIC Database Migration Assistant for Dialer:** In the **Data Source Name** column, select the database you want to migrate and from the **Link** drop-down list select the appropriate database link. Repeat this step for each database you want to migrate.
- **Allow CIC Database Migration Assistant for Dialer to create the link for you:** In the **Data Source Name** column, select the data database you want to migrate and from the **Link** drop-down list ensure **Create Link Automatically** is displayed (this is the default option). Repeat this step for each database you want to migrate.
- **Create a link now:** If a link doesn't exist between the Dialer 2.4/3.0 and Dialer 4.0 databases, create a link for each database you want to migrate.

> **Note:** Creating a link only works to create a link to the same type of database. Create cross-database links manually.

   a. In the **Data Source Name** column, select the data database to migrate and then, in the **Link** list box, click **Create Link**.
   b. In the **Create Link** dialog box, provide the information for the new link and, in the **Link Name** box, type the name to assign to the link. The link name cannot start with a non-alphabetic character.

> **Note:** The information that displays in the **Create Link** dialog box differs depending on the type of server you selected (SQL Server or Oracle).

   c. Click **Create Link...**
   d. In the **Data Source Name** column select the database you want to migrate and then, in the **Link** list box, click the link you created for it. Repeat this step for each database you want to migrate.

10. **SQL Server only**: On the **Database Server Credentials** page, in the **Target DB name** list box, select the name of the Dialer 4.0 database and then click **Next**.

> **Notes:**
> - If you attempt to migrate from a Dialer 2.4/3.0 database version, or to a Dialer 2015 R1 or later database version that the currently running version of CIC Database Migration Assistant for Dialer doesn't support, an error message appears. Ensure that the database version is compatible with this version of CIC Database Migration Assistant for Dialer, as described in Prepare for Interaction Dialer Database Migration.
> - For Oracle users, the target database is a fixed source and cannot be modified. Therefore, the **Target DB** name drop-down list does not appear in Oracle environments.

11. On the **Dialer Workflows to Migrate** page, select the Dialer workflows to migrate and then click **Next**.
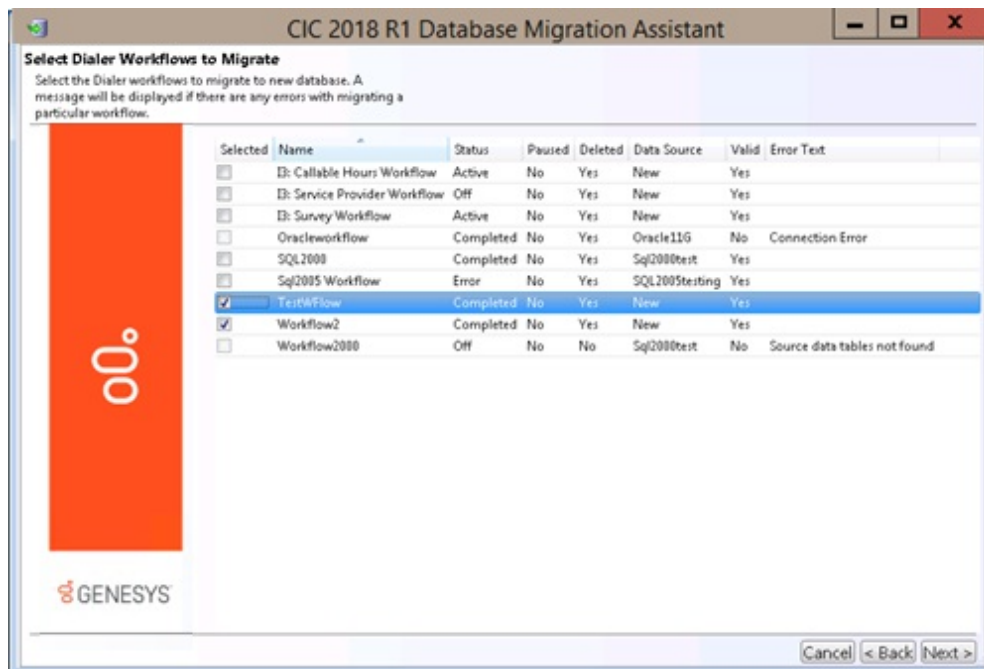
Note: Right-click in the **Workgroups** list to view a selection menu. This menu allows you to filter the workgroups you want to migrate. You can **Select All**, **Select All Paused**, **Select All Deleted**, **Select All By Status** (Active, Completed, Off, Error), **Select All By Data Source**, or **Clear Selection**.

12. On the **Data Filter Settings** page, To limit the migration by date range, provide the migration parameters and then click **Next**.
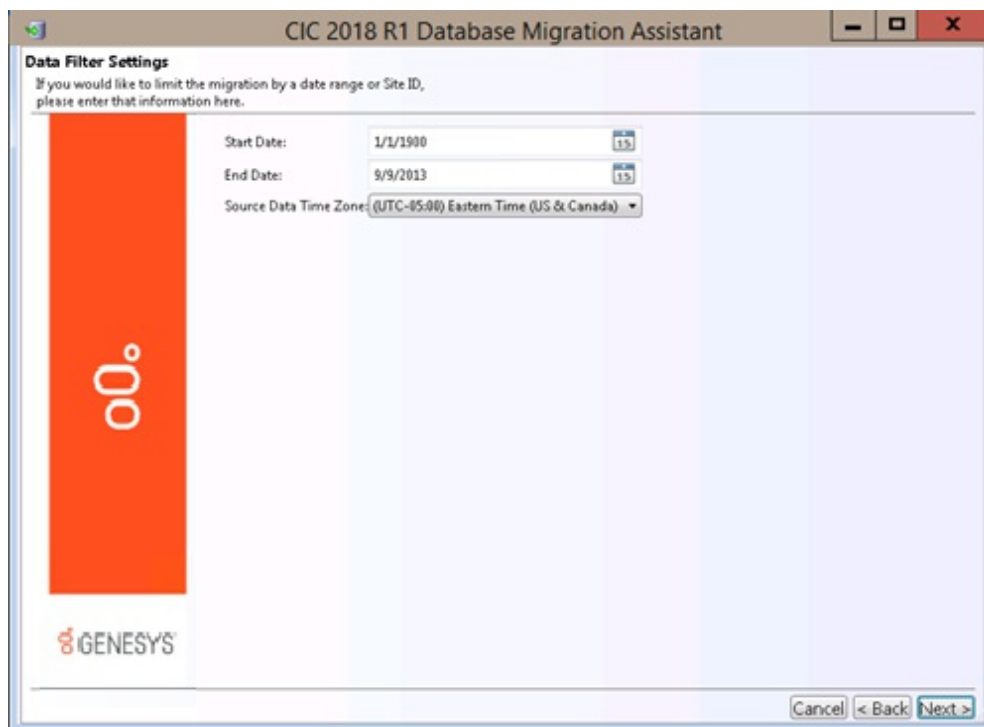
Start Date: Start date to limit the database records that migrate.

End Date: End date to limit the database records that migrate.

Note: All records inserted after 00:00 UTC on the start date and before 24:00 UTC on the end date migrate. You cannot include the current date in the date range.

Source Data Time Zone: Time zone to limit the database records that migrate.

13. On the **Preview Scripts** page, choose one of the following methods to preview the scripts before you run them:
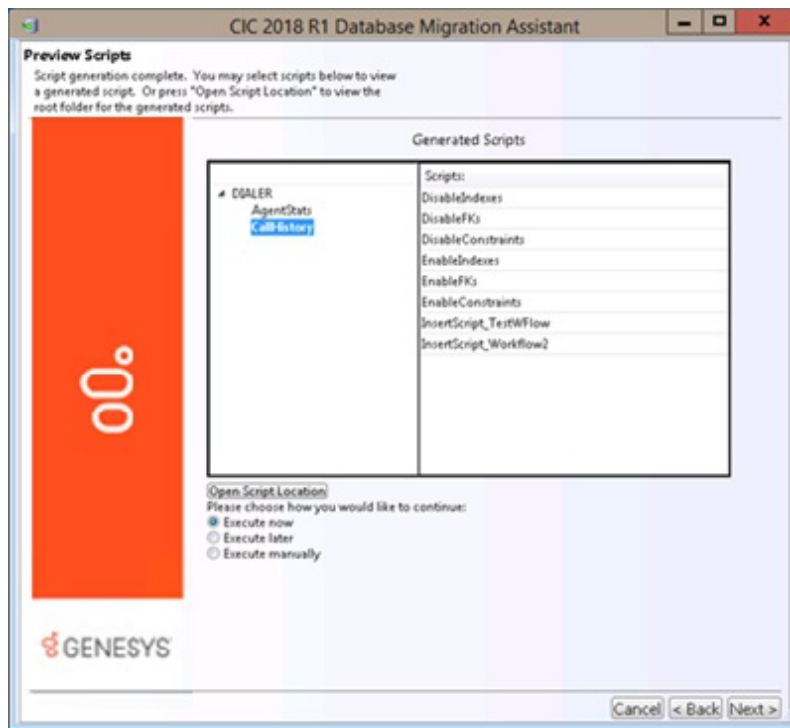
a. In the left column, click a workgroup to expand it and then click a table to display its scripts in the right column.

b. In the right column, double-click a script to view its contents. The script displays in your chosen text editor.

c. Click **X** in the upper right corner of the window to close it.

-OR-

a. On the **Preview Scripts** page, click **Open Script Location**.
b. Drill down to the script you want to view and click a single script to select it. The script appears in the right pane.
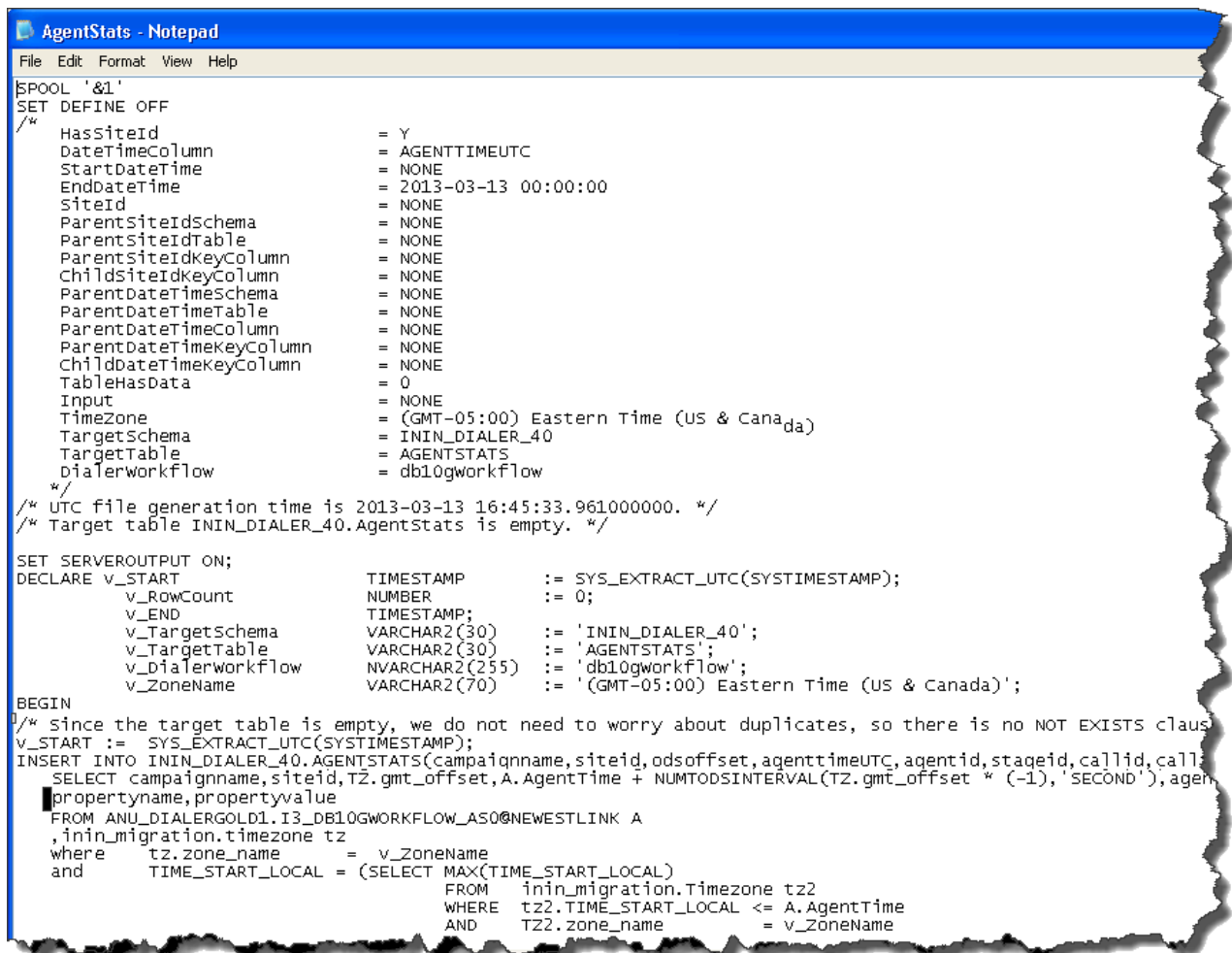
c. To open the script, double-click the script in the left column. The script displays in your chosen text editor.

```
AgentStats - Notepad
File  Edit  Format  View  Help

SPOOL  '&1'
SET DEFINE OFF
/*
    HasSiteId                  = Y
    DateTimeColumn             = AGENTTIMEUTC
    StartDateTime              = NONE
    EndDateTime                = 2013-03-13 00:00:00
    SiteId                     = NONE
    ParentSiteIdSchema         = NONE
    ParentSiteIdTable          = NONE
    ParentSiteIdKeyColumn      = NONE
    ChildSiteIdKeyColumn       = NONE
    ParentDateTimeSchema       = NONE
    ParentDateTimeTable        = NONE
    ParentDateTimeColumn       = NONE
    ParentDateTimeKeyColumn    = NONE
    ChildDateTimeKeyColumn     = NONE
    TableHasData               = 0
    Input                      = NONE
    TimeZone                   = (GMT-05:00) Eastern Time (US & Canada)
    TargetSchema               = ININ_DIALER_40
    TargetTable                = AGENTSTATS
    DialerWorkflow             = db10gworkflow
*/
/* UTC file generation time is 2013-03-13 16:45:33.961000000. */
/* Target table ININ_DIALER_40.AgentStats is empty. */

SET SERVEROUTPUT ON;
DECLARE v_START              TIMESTAMP      := SYS_EXTRACT_UTC(SYSTIMESTAMP);
        v_RowCount           NUMBER         := 0;
        v_END                TIMESTAMP;
        v_TargetSchema       VARCHAR2(30)   := 'ININ_DIALER_40';
        v_TargetTable        VARCHAR2(30)   := 'AGENTSTATS';
        v_DialerWorkflow     NVARCHAR2(255) := 'db10gworkflow';
        v_ZoneName           VARCHAR2(70)   := '(GMT-05:00) Eastern Time (US & Canada)';
BEGIN
/* Since the target table is empty, we do not need to worry about duplicates, so there is no NOT EXISTS claus
v_START :=  SYS_EXTRACT_UTC(SYSTIMESTAMP);
INSERT INTO ININ_DIALER_40.AGENTSTATS(campaignname,siteid,odsoffset,agenttimeUTC,agentid,stageid,callid,call
    SELECT campaignname,siteid,TZ.gmt_offset,A.AgentTime + NUMTODSINTERVAL(TZ.gmt_offset * (-1),'SECOND'),agen
    propertyname,propertyvalue
    FROM ANU_DIALERGOLD1.I3_DB10GWORKFLOW_AS0@NEWESTLINK A
    ,inin_migration.timezone tz
    where   tz.zone_name      = v_ZoneName
    and     TIME_START_LOCAL = (SELECT MAX(TIME_START_LOCAL)
                                    FROM    inin_migration.Timezone tz2
                                    WHERE   tz2.TIME_START_LOCAL <= A.AgentTime
                                    AND     TZ2.zone_name         = v_ZoneName
```

d. Click **X** in the upper right corner.

14. On the **Preview Scripts** page, select an option for running the scripts and then click **Next**.

> **Note:** To change parameters before running the scripts, click **Back**. Your changes reflect when the scripts regenerate.

Execute now: If selected, the system runs the scripts now after the **CIC Database Migration Assistant Completed** page appears.

Execute later: If selected, the system postpones running the scripts. You can open CIC Database Migration Assistant for Dialer and select this migration when you are ready for the system to run the scripts.

Execute manually: If selected, you can run the scripts manually. If you choose this option, it is critical that you run the scripts in a specific order. Genesys doesn't provide support for running the scripts manually.

> **Notes:**
> - The amount of time it takes to run the scripts depends on the amount of data migrating. Migration can take anywhere from minutes to hours.
> - You can view the scripts while they are running.

15. If you chose **Execute now**, the system begins running the scripts and the status appears on the **Executing scripts, please wait** page.
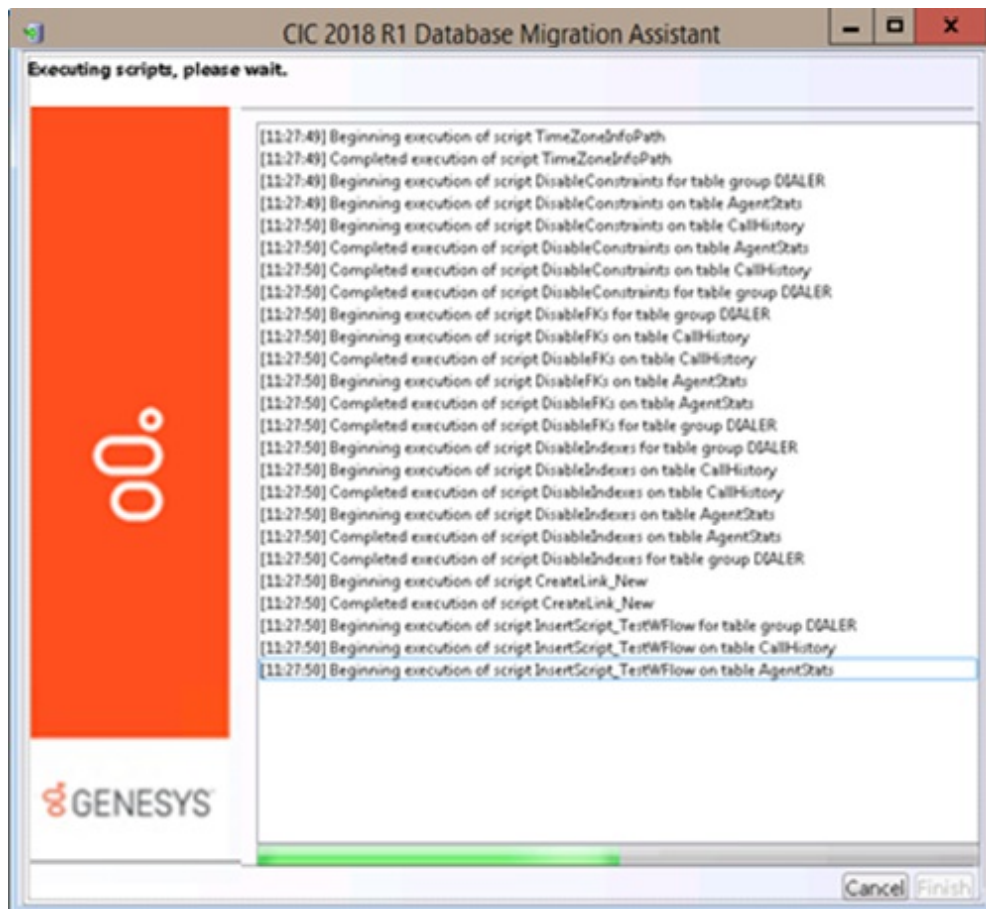
When completed, click **Finish**. The **CIC Database Migration Assistant Completed** page appears.
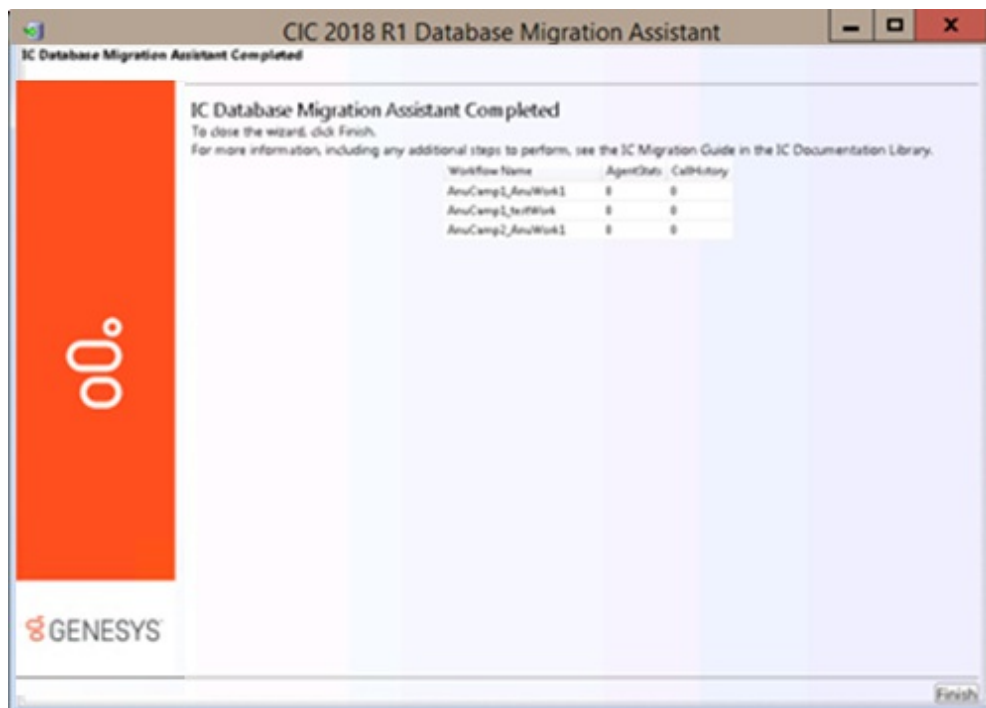
> **Note:** If you are migrating in stages, restart CIC Database Migration Assistant for Dialer to change settings and generate the next set of scripts.

16. If you chose **Execute later**, the system saves the scripts so that you can run them later. Click **Finish.** If you are migrating in stages, restart CIC Database Migration Assistant for Dialer to change settings and generate the next set of scripts.

The **CIC Database Migration Assistant Completed** page appears.

> **Note:** When you are ready to run the scripts, do the following:
> a. Open **CIC Database Migration Assistant**.
> b. On the **Past Migration Utility Executions** page, find the entry with the date and time that matches when you generated the scripts, and with a **Migration Status** of "Ready for restart." Select this entry and then click **Next**. The **Script Generation** page appears.
> c. Click **Execute now**, and then click **Next**.
> d. A message displays indicating the scripts are being run. After the scripts are run, click **Finish**.

17. If you chose **Execute manually**, the system saves the scripts and creates a batch file so that you can run the scripts manually. The batch file is `ExecuteMigrationScripts.bat` and it is in the root directory where the scripts are (for example, $%APPDATA%\Interactive$ $Intelligence\MigrationUtility\[date\_time]$).

> **Warning!**
> If you double-click the batch file or right-click the batch file and then click **Open**, the system **runs** the scripts.

Click **Finish**. The **CIC Database Migration Assistant Completed** page appears.
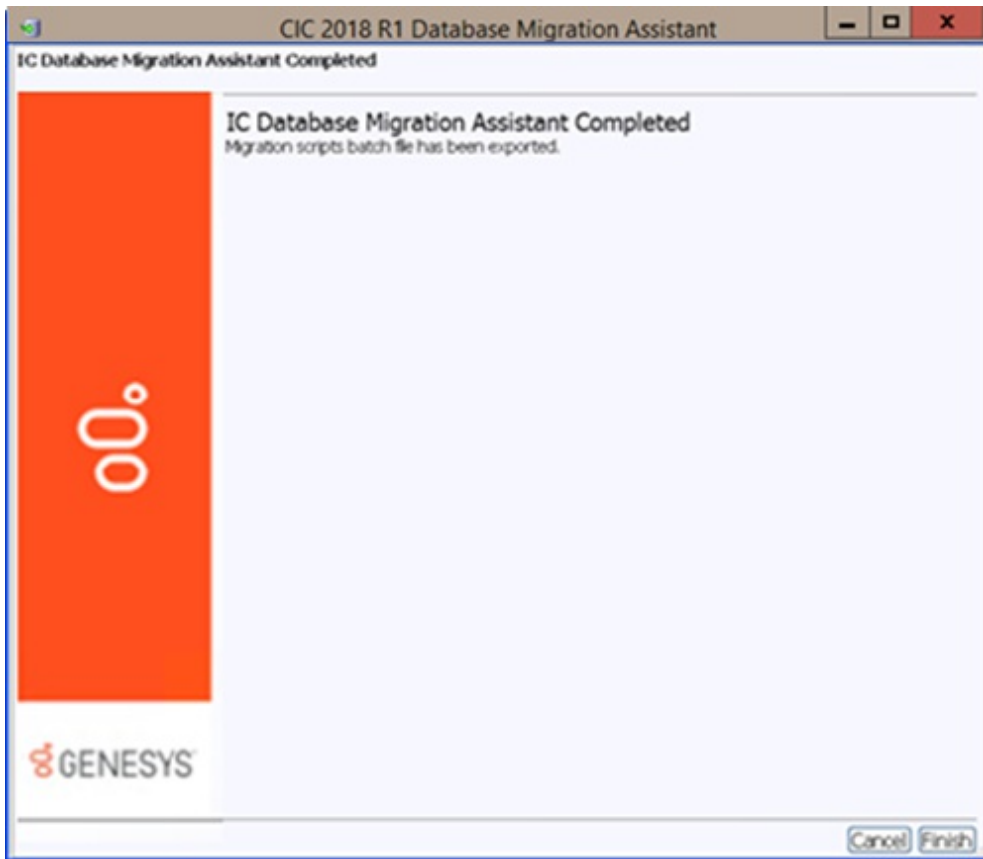
> **Note:** You can use the batch file in two ways:
> - For manual script execution, you can use it to view the order in which to run the scripts and then run the scripts manually using that exact order. It's critical that you run the scripts in the order specified. To view the batch file, right-click `ExecuteMigrationScripts.bat` and click **Edit**.
> - For automated script execution, to have the system run the scripts, double-click **ExecuteMigrationScripts.bat**.

> **Note:** If a catastrophic failure occurs (for example, power loss) while the migration scripts are running, run the `MigrationCleanup.bat` batch file located in the root directory where the scripts are stored (for example, `%APPDATA%\Interactive Intelligence\MigrationUtility\[date_time]`).

19. If you stopped **CIC Service**, restart it.

Troubleshooting the CIC Database Migration Assistant for Dialer

When running the CIC Database Migration Assistant for Dialer, it's possible that the CIC 2015 R1 or later database schema cannot accommodate some source data, causing the migration to fail.

If you encounter a migration failure, find the offending source data and modify or purge it. For help with troubleshooting, see KB article: https://my.inin.com/Support/Pages/KB-Details.aspx?EntryID=Q134616021600411. The article lists the table groups and tables by which the CIC Database Migration Assistant migrates data, and displays these tables and table groups in the same patterns that CIC Database Migration Assistant for Dialer follows during a migration. Locate the table group and the failed table, and then expand the relevant section to find problems, causes, and solutions to the failure.

For further assistance, contact PureConnect Customer Care.

Complete Dialer database post-migration procedures

After migrating the Dialer 2.4/3.0 database to 4.0, complete the post-migration procedures in this section.

Run post-migration check script for Dialer

Genesys recommends that you run the `MigrationCheck.sql` script against the Dialer 4.0 database after migration to check for foreign keys, indexes, and constraints that remain disabled after the migration. If the migration disabled any objects, re-enable them before proceeding and before using the database with a production CIC/Dialer system. If you cannot re-enable an object, such as a foreign key, because of bad data, do one of the following to fix the data problem:

- **For SQL Server**, run the `MigrationCheck.sql` script in the `\CIC Database Migration Assistant\Scripts\sqlserver` folder on the CIC Database Migration client computer.
- **For Oracle**, run the `MigrationCheck.sql` script in the `\CIC Database Migration Assistant\Scripts\oracle` folder on the CIC Database Migration client computer.

Move Dialer contact lists and update Dialer campaigns to point to new location (recommended)

The CIC Database Migration Assistant for Dialer moves historical Dialer data only; it does not move contact lists. Genesys recommends that you move contact lists to the 4.0 database server. For instructions on how to move a Dialer contact list and update a Dialer campaign to point to a new location, see KB article: https://my.inin.com/Support/Pages/KB-Details.aspx?EntryID=Q13606990310036.

Migrate the Configuration

Import CIC 2.4/3.0 Configuration Data

This section describes importing CIC 2.4/3.0 configuration data into a CIC 2015 R1 or later server using Interaction Migrator.

Before you run Interaction Migrator to import CIC 2.4/3.0 configuration data

- Ensure that the initial run of CIC Setup Assistant completed successfully on the *import* CIC 2015 R1 or later server as part of your migration scenario.
- Ensure that CIC Database Migration Assistant migrated data successfully in a CIC 3.0 database to a new CIC 4.0 database as part of your migration scenario.
- **Interaction Dialer:** Ensure that CIC Database Migration Assistant for Dialer migrated data successfully in a Dialer 2.4/3.0 database to a new Dialer 2015 R1 or later database as part of your migration scenario.
- Before you import 2.4/3.0 configuration data, verify that the Network Interface Card (NIC) or NIC team uses the same name on the new server as on the existing server. Verify that the names are the same to ensure that the migrated lines function correctly.

Run Interaction Migrator to import CIC 2.4/3.0 configuration data

This procedure describes how to import CIC 2.4/3.0 configuration data using Interaction Migrator.

> **Note:** For Interaction Dialer, Interaction Migrator imports Interaction Dialer 2.4/3.0 configuration data along with the CIC 2.4/3.0 configuration data.

To import CIC 2.4/3.0 configuration data:

1. Copy the CIC 2.4/3.0 configuration data file from your storage media (as described in the last step in <u>Export CIC 2.4/3.0 Configuration Data</u>) to a location on the CIC 2015 R1 or later server. For example, copy the file to `D:\Temp\ImportData`.

   > **Important!**
   > Do *NOT* copy the file to the root directory of the drive where you installed CIC (for example, do not copy to the root of `\I3\CIC` as it overwrites critical files).

2. Log on to the CIC 2015 R1 or later server using the same domain user account that CIC Service is set to run under. The account is the same CIC administrator account used when you ra CIC Setup Assistant as part your migration scenario.

3. **Stop CIC Service** on the CIC 2015 R1 or later server. Interaction Migrator requires you to stop CIC Service when importing CIC data.

   > **Important!**
   > If you are running a Switchover pair of CIC servers, you must stop the CIC Service on both servers. Once the process completes and you start the CIC Service on the computer where you are importing your configuration, you can restart the other server as backup. At that point, it replicates the new imported configurations from the primary CIC server. For more information, see the *Interaction Migrator Technical Reference*.

4. Start Interaction Migrator, either from the Interaction Migrator **link on the desktop**, or from **Start -> Programs -> PureConnect -> Interaction Migrator**.

5. On the **Welcome** page, click **Next**.
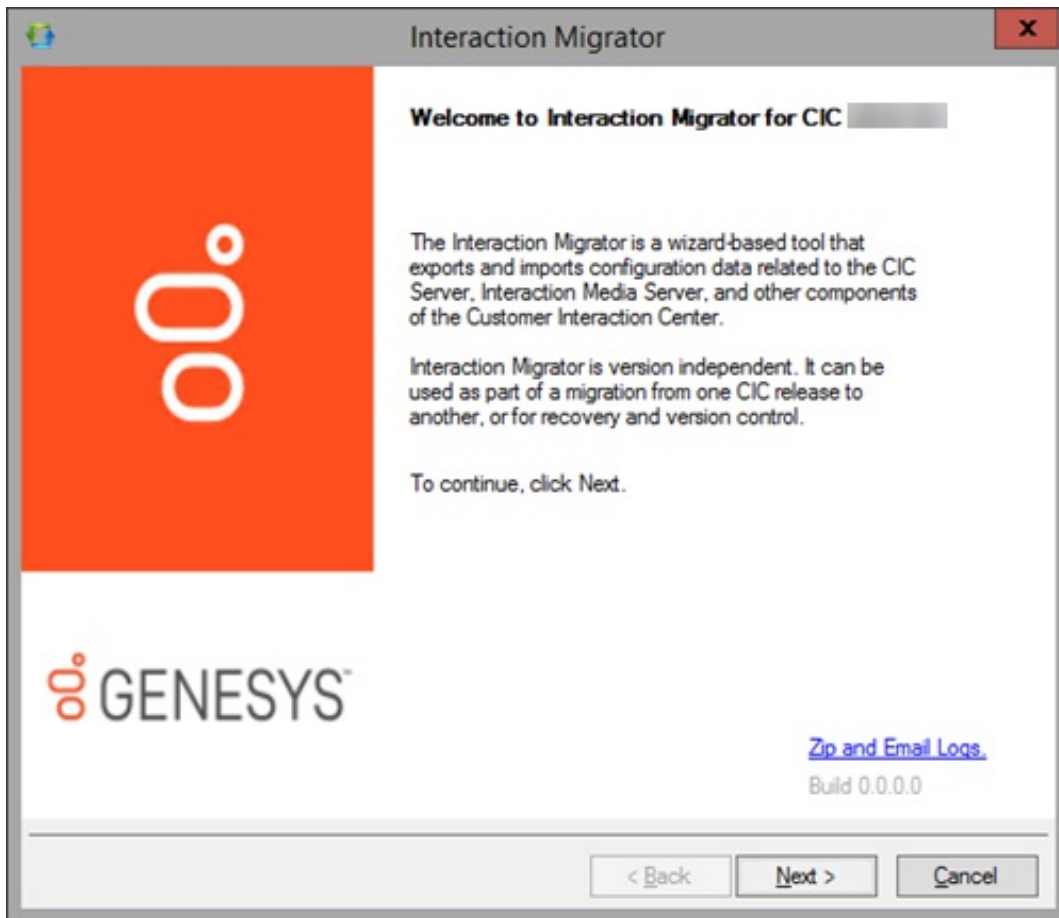
If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.

6. On the **Task Selection** page, click **Import configuration data** and then click **Next**.
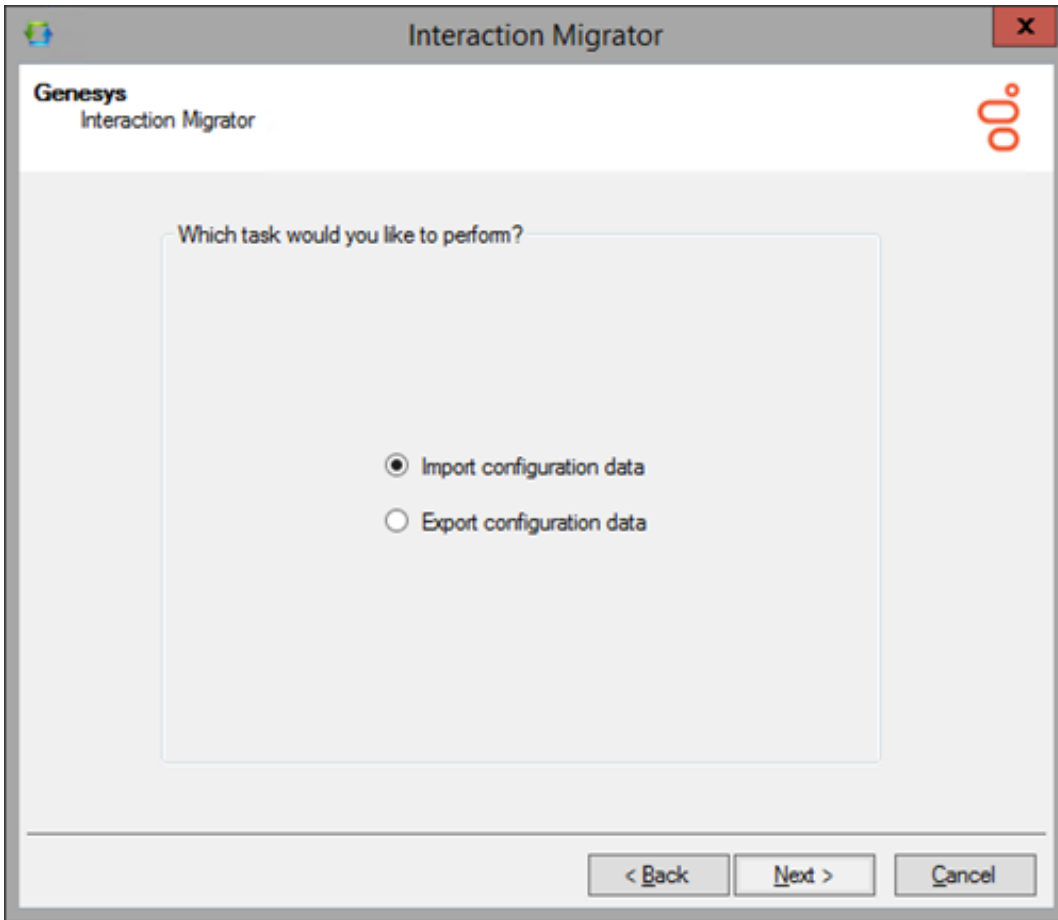
7. On the **Configuration** page, specify the location of the CIC 2.4/3.0 configuration data zip file and the folder to extract the CIC 2.4/3.0 configuration data file. Click **Migration Mode** and then click **Next**.
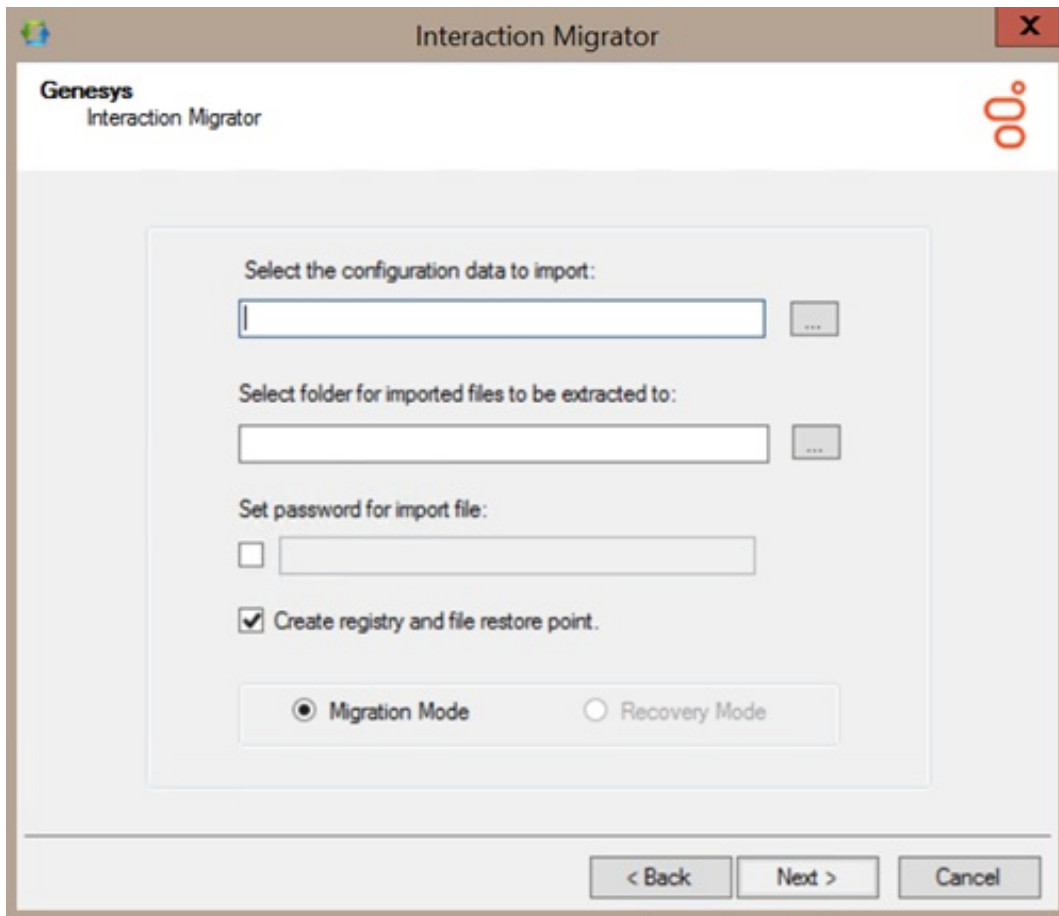
Select the configuration data to import: Location of the exported CIC 2.4/3.0 configuration data file (*ServerName_DateTimeStamp*.ininmigr) on the USB key or other writeable storage location.

Select folder for imported files to be extracted to: Destination directory for the extracted the CIC 2.4/3.0 configuration data file. For example, extract the data to D:\Temp\ImportData.

> **Important!**
> Do *NOT* copy the file to the root directory of the drive where you installed CIC 2015 R1 or later (for example, do not copy to the root of \I3\CIC) as critical files are overwritten.

Set password for export file: If selected, you set a password on the CIC 2.4/3.0 configuration data file.

[Password]: Password on the CIC 2.4/3.0 configuration data file. This box is available if you selected **Set password for export file**.

Create registry and file restore point: If selected, Interaction Migrator creates a registry restore point for restoring the registry back to the point before you ran Interaction Migrator to import the CIC 2.4/3.0 configuration data. Interaction Migrator exports a registry of the Interactive Intelligence key in hive format. This file is in the \I3\CIC\Migrator folder and has a file name extension of .hive. Genesys recommends that you keep the default setting

Migration Mode: If selected, Interaction Migrator runs in migration mode. Use this option for this import task.

> **Notes:**
> - When moving data from one server to another, consider server name and site name changes. Interaction Migrator changes the data at run time before importing it into the new server.
> - You **cannot** import a configuration data file created using an older version of Interaction Migrator. However, you **can** import a configuration data file created using the same version of Interaction Migrator but an older build number.

8. After Interaction Migrator loads the CIC 2.4/3.0 configuration data file and extracts the data, on the **Import Items** page, select the components to import and then click **Next**.
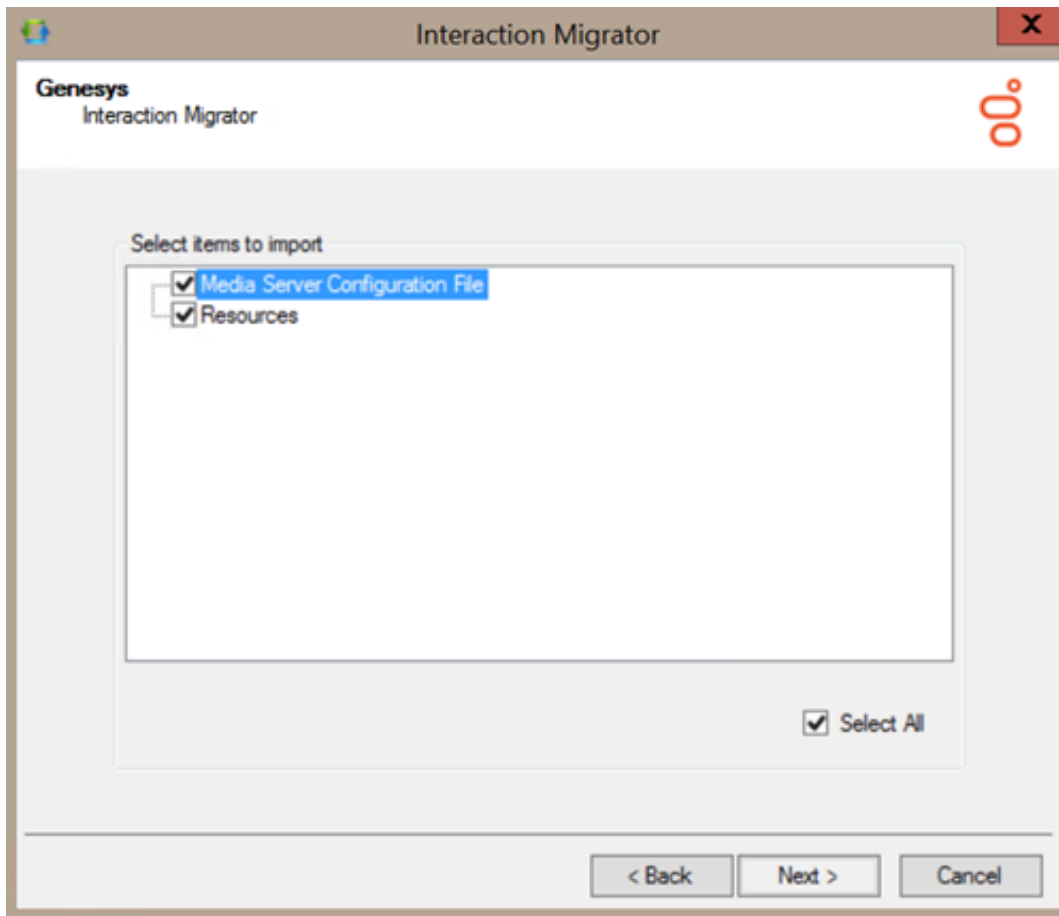
Notes:

- Interaction Migrator does not import CIC Data Source components as it would overwrite the CIC 2015 R1 or later configuration.
- **Interaction Dialer:** The Interaction Dialer configuration data appears in this list and is included in the CIC configuration data import process.
- **Important:** Ensure that you migrated the Tracker database using CIC Database Migration Assistant before proceeding with the import. If you import data before migrating the Tracker database, the result is duplicate entries with different ID keys, and historical reports that don't run correctly.
- **Interaction Desktop:** Interaction Migrator converts client settings from Interaction Client .NET Edition 3.0 format to Interaction Desktop format. For more information, see the *Transition to Interaction Desktop Administrator's Guide* in the PureConnect Documentation Library.

9. On the **Import Confirmation** page, confirm the selections and then click **Next** to start the import process.

Interaction Migrator

Genesys
Interaction Migrator

Import Confirmation

Import File Name:C:\Users\echo_user\Documents\echo_09202017105730.ininmigr

The following files will be imported:

Media Server Configuration File
Resources

[< Back] [Next >] [Cancel]
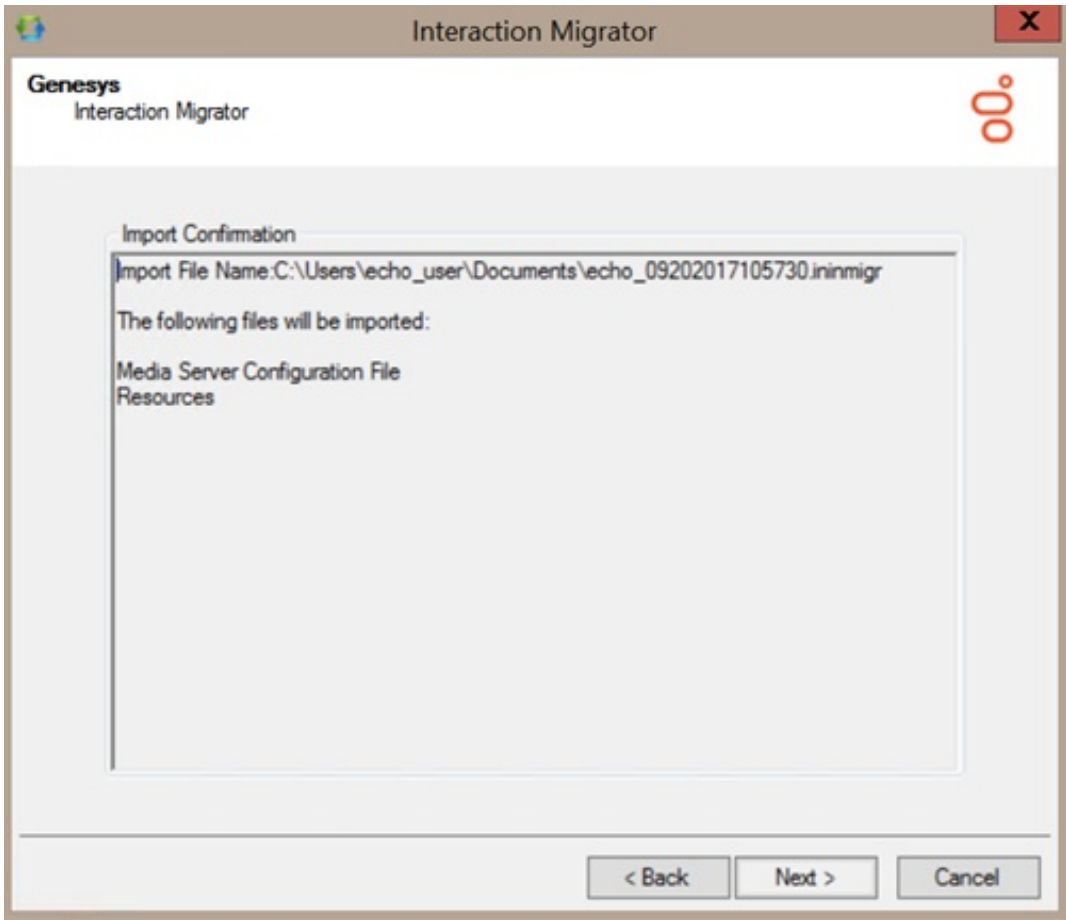
Note: To change your selections, click **Back**.

The **Import Status** page displays real-time updates during the import process.
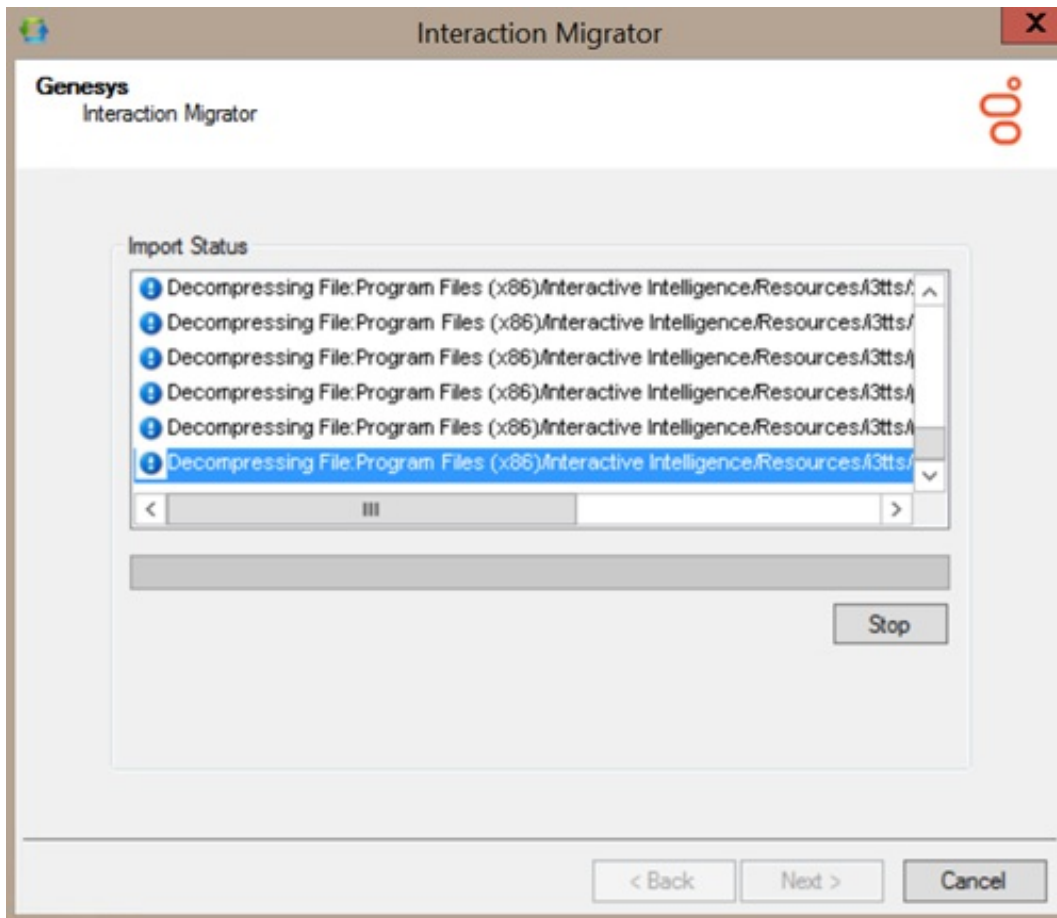
The import process can take several minutes depending on the amount of data being exported.

Note: To stop the process at any time, click **Stop**. After stopping the process, you can change your selections without exiting Interaction Migrator.

10. When the import process is complete, the **Import Status** page displays when the import was completed and how long the process took. Click **Next** to continue.
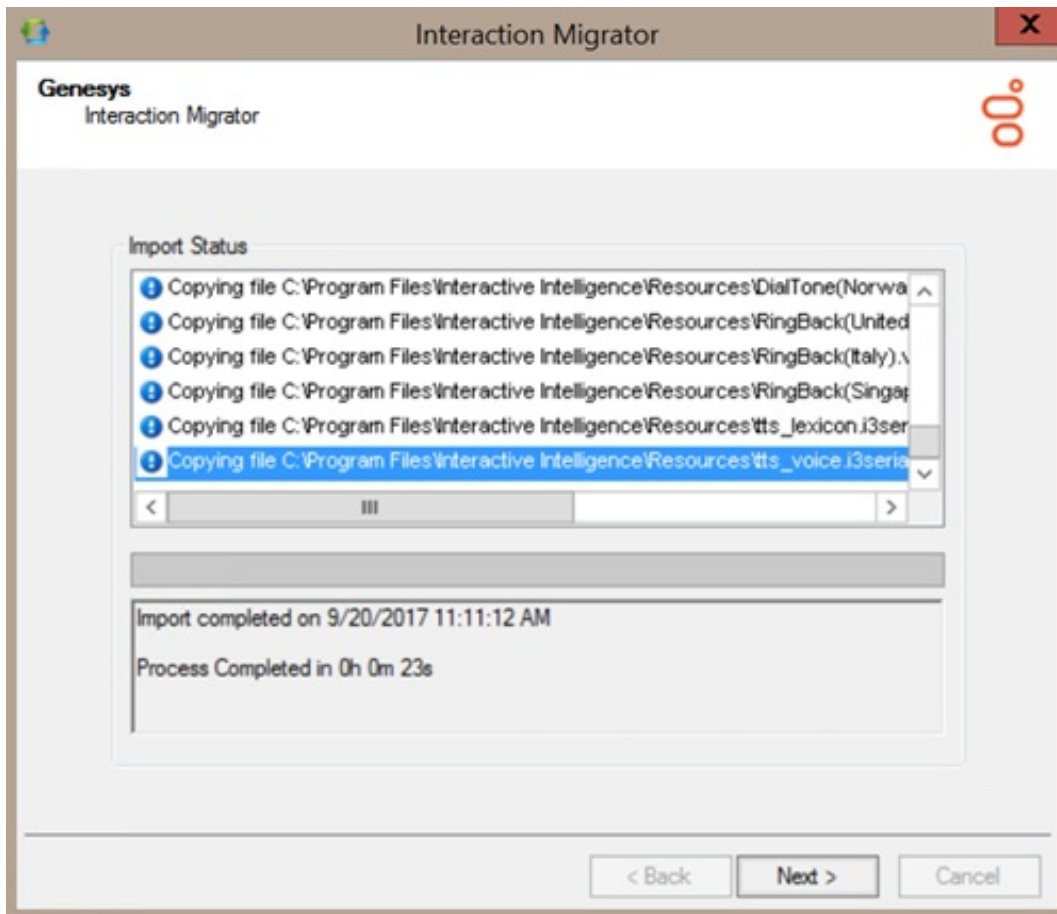
11. Click **Finish** to close Interaction Migrator and restart CIC Service.
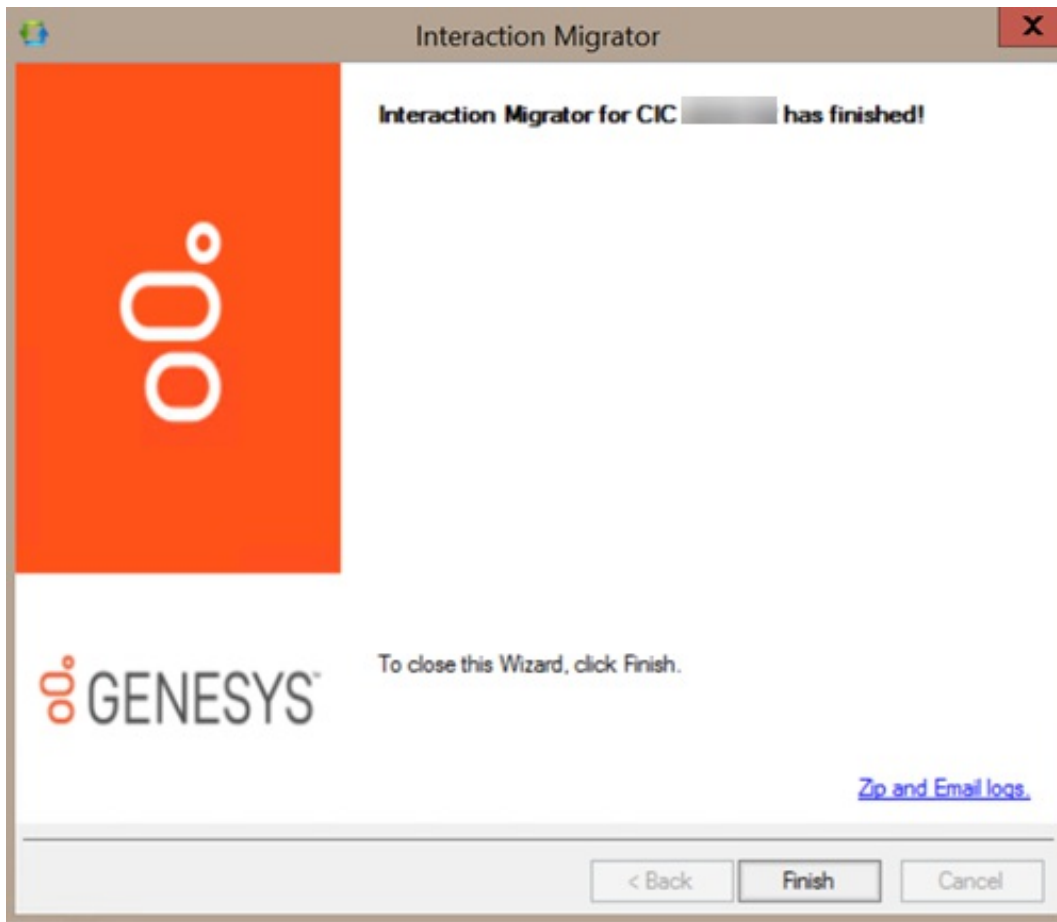
> **Notes:**
> - If you encountered problems during the import process, click **Zip and Email logs** to open Outlook and send a copy of the logs to PureConnect Customer Care.
> - The naming convention for the *base* languages changed to a single element (for example, `fr-fr` is now just `fr`). If you imported Interaction Attendant Data, the import renamed the language folders in the `InteractionAttendantWaves` folder to reflect the new naming convention.

Re-activate ACD email routing
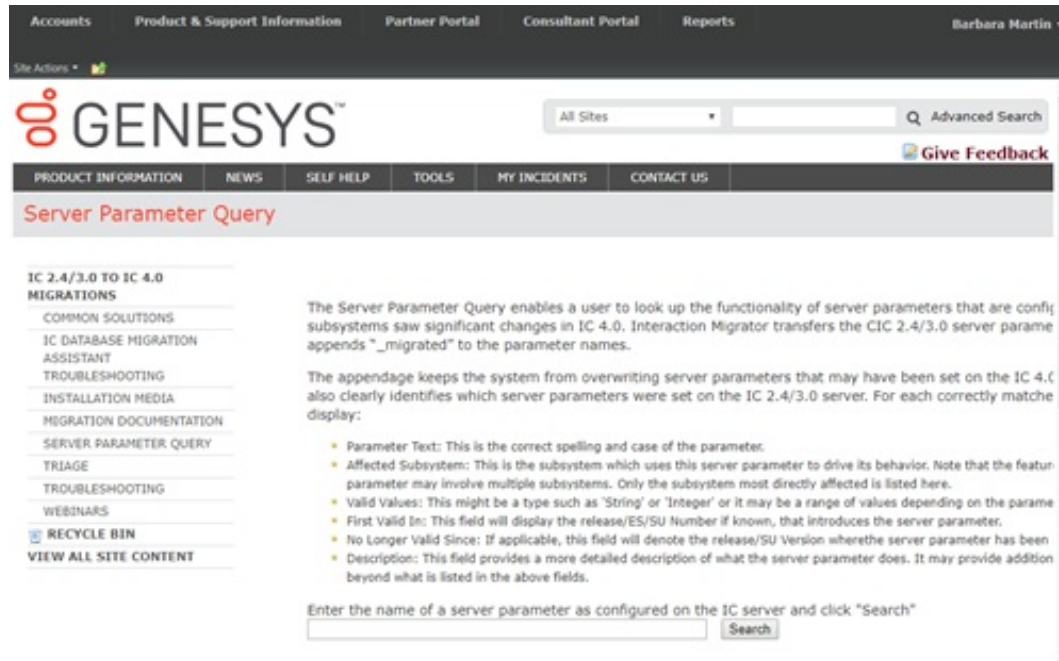
The version of Interaction Migrator in the current CIC 2.4/3.0 to CIC 2015 R1 or later migration package imports all mail providers and sets them to inactive during migration mode. Setting them to inactive ensures that the migration doesn't affect the statistics of emails queued into workgroups on the source CIC 2.4/3.0 server.

Once the CIC 2015 R1 or later server is in full production, re-activate ACD Email Routing for each workgroup that the CIC 2.4/CIC 3.0 server is no longer monitoring and determine which account to use to queue emails.

Review migrated server parameters

Several CIC subsystems changed significantly in CIC 2015 R1 or later. The Interaction Migrator import transfers to the CIC 2015 R1 or later server the server parameters that you have set on your CIC 2.4/3.0 system and its subsystems, and appends `_migrated` to the parameter names. The appendage keeps the system from overwriting server parameters set on the CIC 2015 R1 or later server before importing data. It also identifies which server parameters are set on the CIC 2.4/3.0 server.

A **Server Parameter Query** is available on the PureConnect Customer Care site at
https://my.inin.com/products/selfhelp/migrationsto40/pages/server-parameter-query.aspx.

The Server Parameter Query allows you to look up (query) a server parameter by name and see an explanation of what it does, along with ranges of valid values and deprecation information. Follow the instructions on the page.

Once the server parameters migrate, query and remove the ones you don't need, and remove `_migrated` from the ones that you do need.

Handler post-migration procedures

If you use custom handlers, complete the handler post-migration procedures as described in Migrate CIC 2.4/3.0 Handlers.

IP table names

The Interaction Migrator import appends `_migrated` to the IP table names to prevent collisions.

Change in default SIP transport protocol

In CIC 2.4, new SIP lines default to using UDP for their transport. In CIC 3.0, the default transport protocol switched in response to some of the connectivity advantages that TCP offers. However, because of support issues, such as problems with TCP offloading and large sites impacted by the OS limit of 4000 TCP connections, the *default protocol changed back to UDP in CIC 2015 R1 and later.*

As a best practice, Genesys recommends setting up your environment using UDP as your SIP transport. However, if you are using TCP today and you import existing configurations into your CIC 2015 R1 or later server, those configurations remain set for TCP. Only new lines and stations default to UDP. Do *not* change those setups as part of your migration to CIC 2015 R1 or later. To minimize the set of changes you are implementing at any given time, complete those changes well in advance of, or after your move to CIC 2015 R1 or later, as a separate project.

Complete Interaction Dialer post-migration procedures

Complete the Interaction Dialer configuration post-migration procedures in this section. Ensure that you reviewed the new features and changes in Interaction Dialer 2015 R1 or later described in [Interaction Dialer](#).

Review migrated Interaction Dialer settings and complete post-migration procedures in Interaction Administrator

Post-migration, review all Interaction Dialer Manager containers to locate and fix any errors that occurred during import, especially in Rule Sets and Policies Sets. The reasoning is that workflows don't exist in Interaction Dialer 2015 R1 or later and don't migrate.

Complete the following Interaction Dialer post-migration procedures in Interaction Administrator. Ensure that you reviewed the new features and changes in Interaction Dialer 2015 R1 or later described in [Interaction Dialer](#).

For more information, see the *Interaction Dialer Manager* documentation in the [PureConnect Documentation Library](#).

Reconfigure Rules and Policy Sets

Interaction Migrator does minimal conversion for Rule/Policy statistics, and they can contain errors acquired during import. Because **Interaction Dialer 3.0** statistics do not match **Interaction Dialer 2015 R1 or later** statistics, reconfigure them manually to correct potential validation errors.

1. Open Interaction Administrator.

2. In the **Interaction Dialer > Advanced Interaction Dialer > Rule Sets** container, reconfigure Rule Set statistics for your Interaction Dialer configuration.
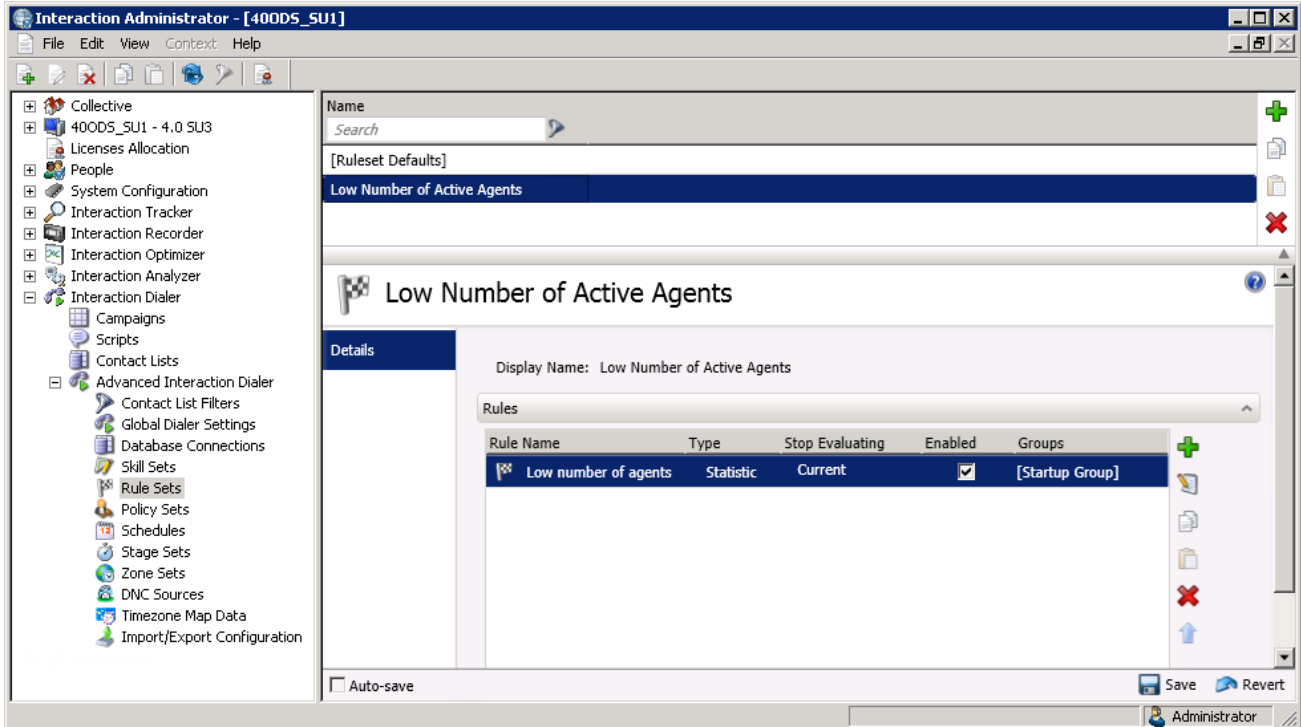
3. In the **Interaction Dialer > Advanced Interaction Dialer > Policy Sets** container, reconfigure Policy Set statistics for your Interaction Dialer configuration.
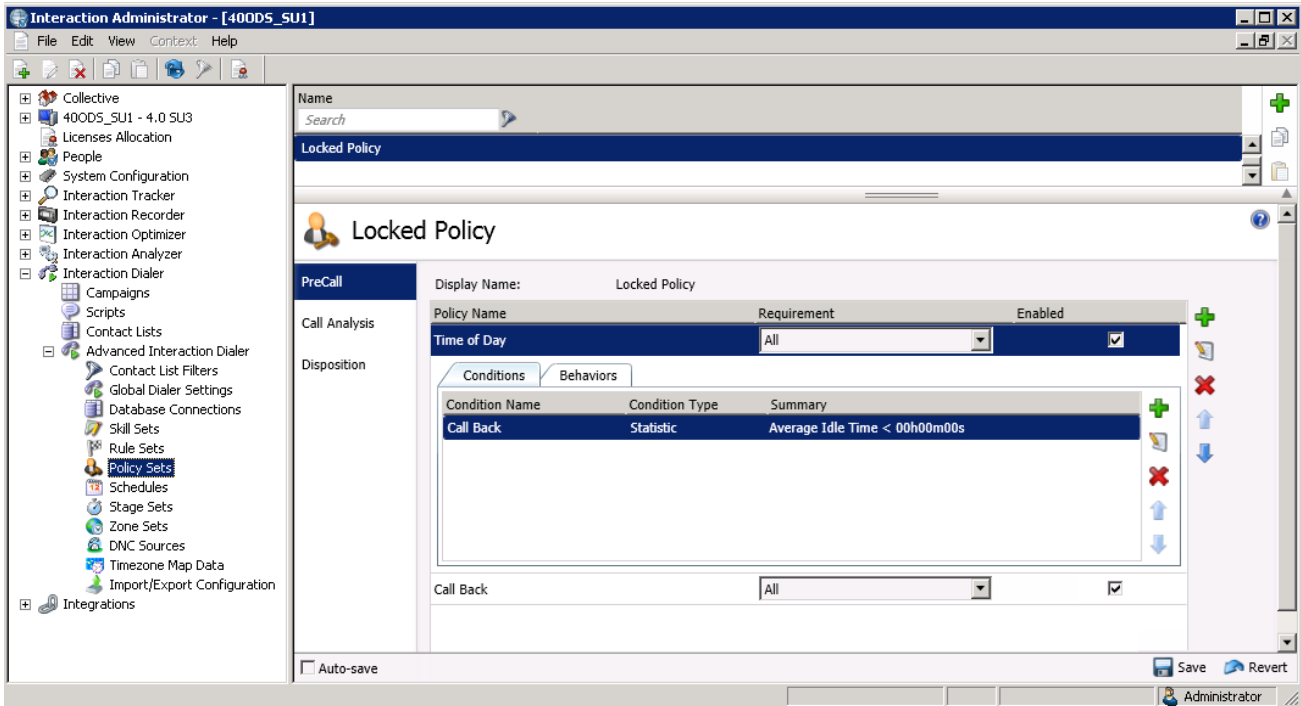
Configure Campaigns in a multiple ODS environment

Post-migration, all campaigns distribute across all ODS servers. If you want the same configuration you had in Interaction Dialer 3.0 (for example, Campaign1 on ODS1 and Campaign2 on ODS2), reconfigure these settings manually.

To configure campaigns in a multiple ODS environment:

1. Open Interaction Administrator
2. In the Dialer Settings area of the **Interaction Dialer > Campaign > Basic Configuration** container, do the following for each campaign:
   a. Change the **Use All Dialing Servers** to **No** (set to **Yes** by default)
   b. In the **Dialing Servers** list box, click the server to use for that particular campaign and then click **Add**.

Configure Time Zone Maps and assign them to campaigns, where applicable

If your contact list includes each contact's time zone, you can use Interaction Dialer's Time Zone Blocking feature to prevent placing calls to those contacts at inappropriate times.

> **Note:** In **Interaction Dialer 2.4**, time zone settings did not exist so you need to configure them for existing campaigns. Create the time zones for your contact lists, map the data files, assign time zones to campaigns, and enable the automatically map time zones feature.

To verify time zone settings:

Interaction Dialer 3.0 introduced the time zone feature. Post-migration, best practice recommends that you confirm that the time zone settings migrated correctly.

1. Open Interaction Administrator.
2. In the **Interaction Dialer > Advanced Interaction Dialer > Timezone Map Data** container, click Timezone Map Data Settings.
3. Select each Timezone Map Data, verify no validation errors exist, and configure a priority, if needed.

To set time zone mappings:

1. Open Interaction Administrator.
2. In the **Interaction Dialer > Campaigns** container, click Timezone Settings.
3. Select a campaign, click **Basic Configuration**, and under **Timezone Settings**, specify the time zone mappings.

Configure DNC Sources and assign them to campaigns, where applicable

A DNC Source provides a list of telephone numbers that campaigns shouldn't dial. Genesys strongly encourages Interaction Dialer customers to scrub contact lists against do-not-call (DNC) lists. Scrubbing prevents campaigns from dialing contact numbers.

Note: In **Interaction Dialer 2.4**, DNC sources did not exist so you need to configure them for use in campaigns. Create a DNC source and then assign it to applicable campaigns.

Interaction Dialer 3.0 introduced the DNC sources feature. Post-migration, best practice recommends that you confirm that the DNC sources migrated correctly.

To configure or verify DNC Sources:

1. Open Interaction Administrator.

2. In the **Interaction Dialer > Advanced Interaction Dialer > DNC Sources** container, create or verify DNC sources.
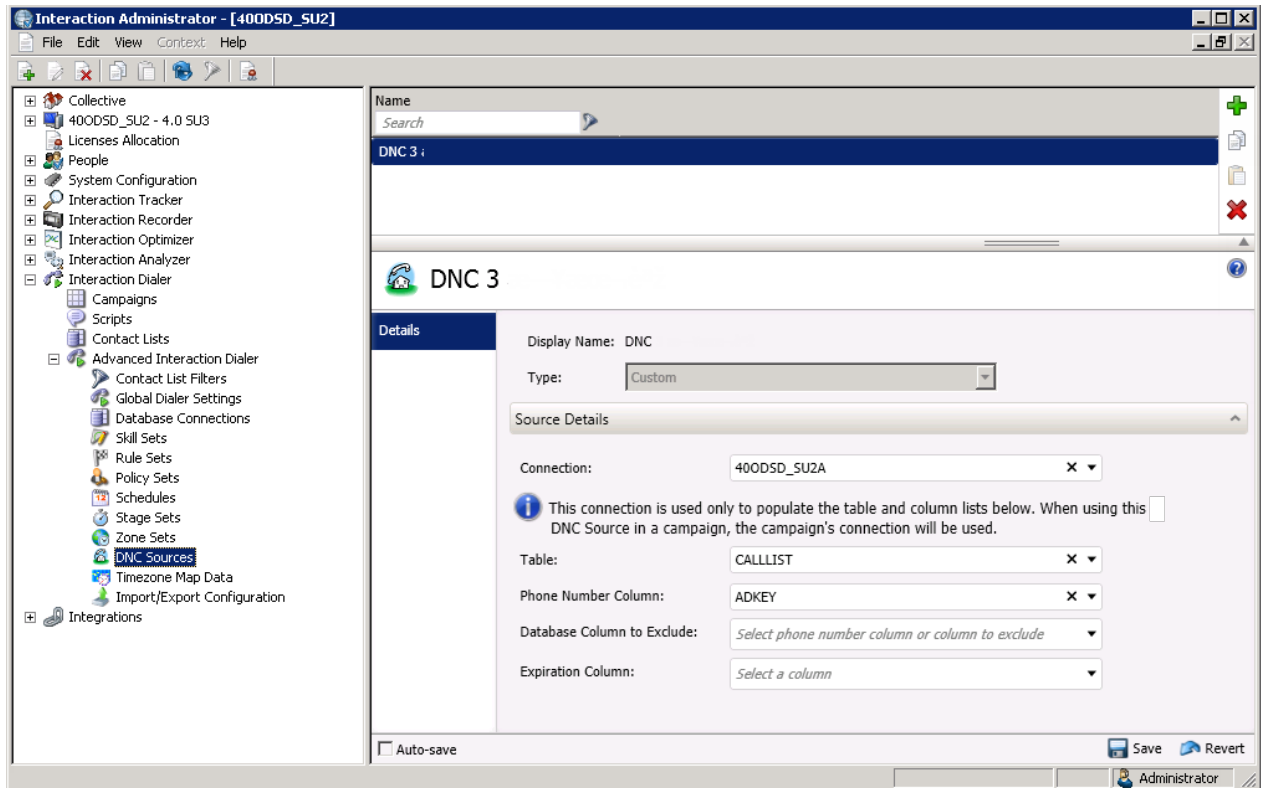
To assign DNC sources to a campaign:

1. Open Interaction Administrator.

2. In the **Interaction Dialer > Campaigns** container, select a campaign, click **Basic Configuration**, and under **Contact List Settings**, specify the DNC source criteria.

Basic Configuration	Dial Settings
Recall Control	Contact List Settings

Abandons

Skills and ACD

Automation

Contact List: calllist   ✕ ▼

Sort Criteria:

Available items:

Filter items   ✕

```
ATTEMPTS
CELLPHONE
FIRSTNAME
HOMEPHONE
I3_ACTIVECAMPAIGNID
I3_ATTEMPTSABANDONED
I3_ATTEMPTSBUSY
I3_ATTEMPTSDAILY
I3_ATTEMPTSFAX
I3_ATTEMPTSMACHINE
I3_IDENTITY
```

ASC ▼

Add ❯

❮ Remove

Selected items:

⬆ Move up

⬇ Move down

Filters:

Available items:

Filter items   ✕

Add ❯

❮ Remove

Selected items:

⬆ Move up

⬇ Move down

Filter Callbacks: ☐ Agent Scheduled   ☐ Auto-Scheduled

Priority Dialing

☐ Enable

Query frequency: [slider]   5 ⬍   second(s)

Sort Criteria:

Available items:

Filter items   ✕

```
ATTEMPTS
CELLPHONE
FIRSTNAME
HOMEPHONE
I3_ACTIVECAMPAIGNID
I3_ATTEMPTSABANDONED
I3_ATTEMPTSBUSY
I3_ATTEMPTSDAILY
I3_ATTEMPTSFAX
I3_ATTEMPTSMACHINE
I3_ATTEMPTSNOANSWER
I3_IDENTITY
```

ASC ▼

Add ❯

❮ Remove

Selected items:

⬆ Move up

⬇ Move down

DNC Source: *No DNC Source selected.*   ▼   ⚙ Perform Bulk DNC Scrub

Configure maximum calls and maximum call rate

In Interaction Administrator, you can edit Outbound Dialer Server maximum calls and maximum call rate threshold values.

- The **Maximum Calls** setting defines the global limit on the number of calls Dialer places so that it doesn't use up all available lines or exceed the number of physically available channels. You can set a value ranging from 0 to 2,000,000,000 calls.
- If you are using the Bulk Call API, set the **Maximum Call Rate** to 16 calls per second or more. A high performance bulk call placement API that consumes less system resources while providing higher call throughput.

In **Interaction Dialer 2.4**, the ability to define maximum calls and maximum call rates did not exist so you need to configure them for ODS servers. In **Interaction Dialer 3.0**, you define maximum calls and maximum call rates using server parameters. Post-migration, configure these settings for **Interaction Dialer 2015 R1 or later**.

To configure maximum calls and maximum call rate:

1. Open Interaction Administrator.

2. In the **Interaction Dialer > Advanced Interaction Dialer > Global Dialer Settings** container, select **Outbound Dialing Servers.**

   Each row in the grid contains the name of an Outbound Dialer Server.

3. Specify the **Maximum Calls** value and the **Maximum Call Rate** for each Outbound Dialer Server using the up or down arrows.
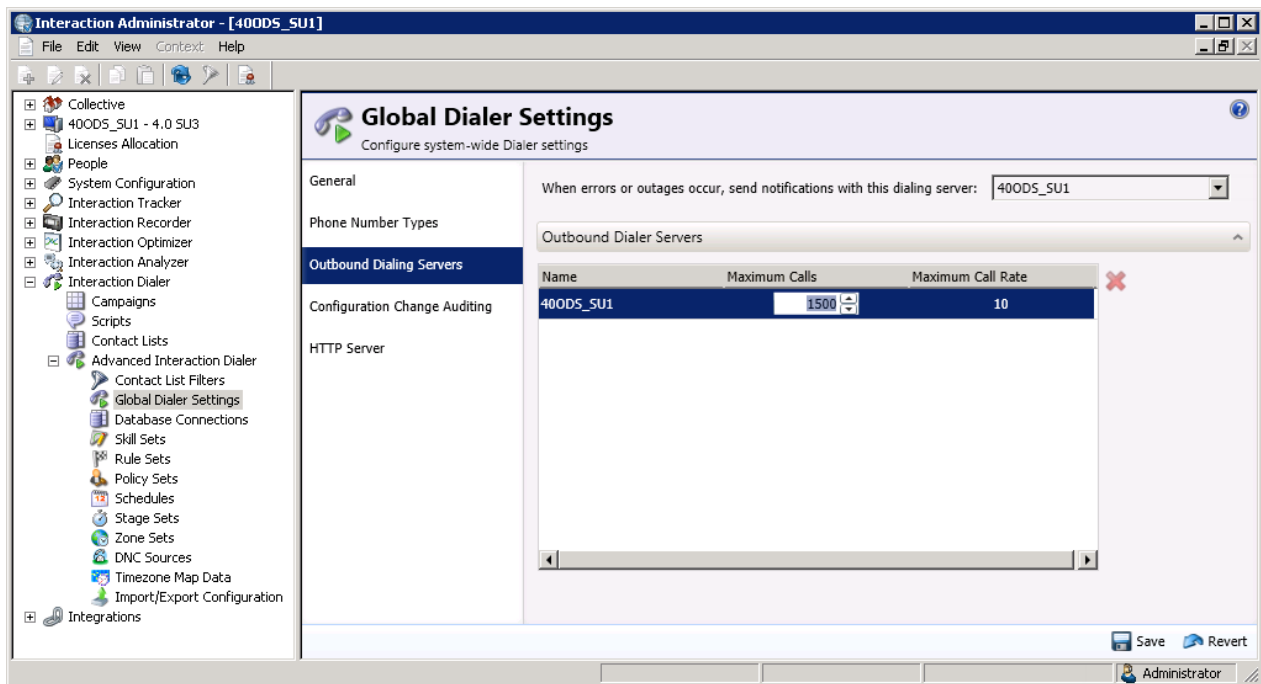
Configure maximum lines per campaign

The **Max Lines per Campaign** setting controls the maximum number of lines that each Outbound Dialer server can use to conduct the campaign. Each Outbound Dialer server maintains this number of calls concurrently to utilize the maximum number of lines. The maximum value is 2000 lines.

In **Interaction Dialer 2.4** and **3.0**, this setting was only accessible with an agentless campaign. In **Interaction Dialer 2015 R1 or later**, you can configure maximum lines for any campaign.

To configure maximum lines per campaign:

1. Open Interaction Administrator.
2. In the **Interaction Dialer > Campaigns** container, select the campaign to configure and then click **Basic Configuration**.
3. In the **Dialer Settings** group box next to **Max Lines per Campaign**, use the slider or the up and down arrows to set the maximum number of lines each Outbound Dialer server uses to conduct the campaign.

Specify default settings for Interaction Dialer Manager containers

In Interaction Administrator, several **Interaction Dialer** containers in include an modifiable **[Default Settings]** entry. This entry defines a set of attributes assigned to subsequent new entries. If you edit the [Default Settings] entry and change an attribute, subsequent new entries inherit its settings. Updating the **[Default Settings]** entry does not affect existing entries in any way.

The Interaction Administrator containers that contain a **[Default Setting]** entry are:
- Campaigns
- Database Connection
- Rule Sets
- Policy Sets
- Stage Sets
- Zone Sets

Post-migration, best practice recommends that you examine the **Interaction Dialer 4.0** default entries and configure them according to in-house preferences.
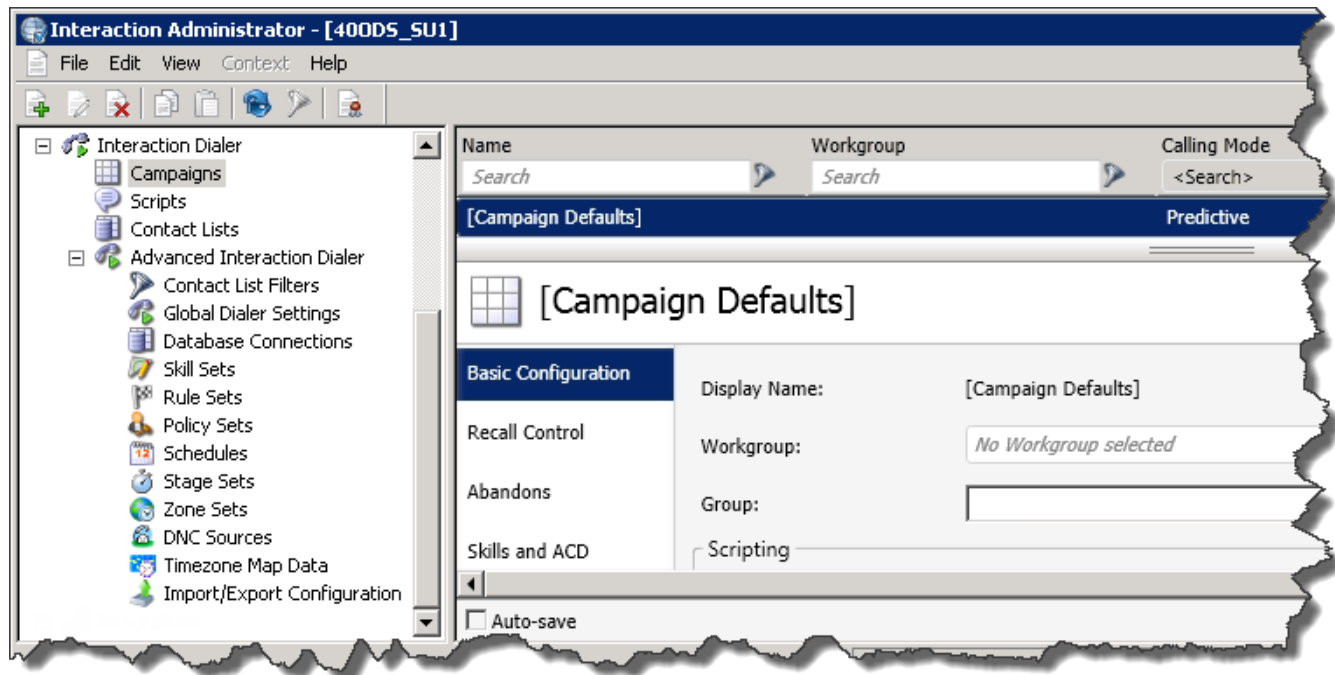
Configure new Interaction Dialer 4. 2015 R1 or later features in Interaction Dialer Manager

Review and modify Wrap-up Categories and Codes

In Interaction Dialer 2015 R1 or later, Reason and Finish Codes translate into Wrap-up Categories and Wrap-up Codes. Migrating from Interaction Dialer 2.4/3.0 to Interaction Dialer 2015 R1 or later can inadvertently create an incorrectly wrapped code and thus, invalidate an associated campaign.

To review Wrap-up Codes and Wrap-up Categories and reconfigure Policy Sets and Base Scripter Dispositions:
1. Open Interaction Administrator.
2. Review the Dialer-related Wrap-up Categories in the **People > Wrap-up > Wrap-up Categories** container.
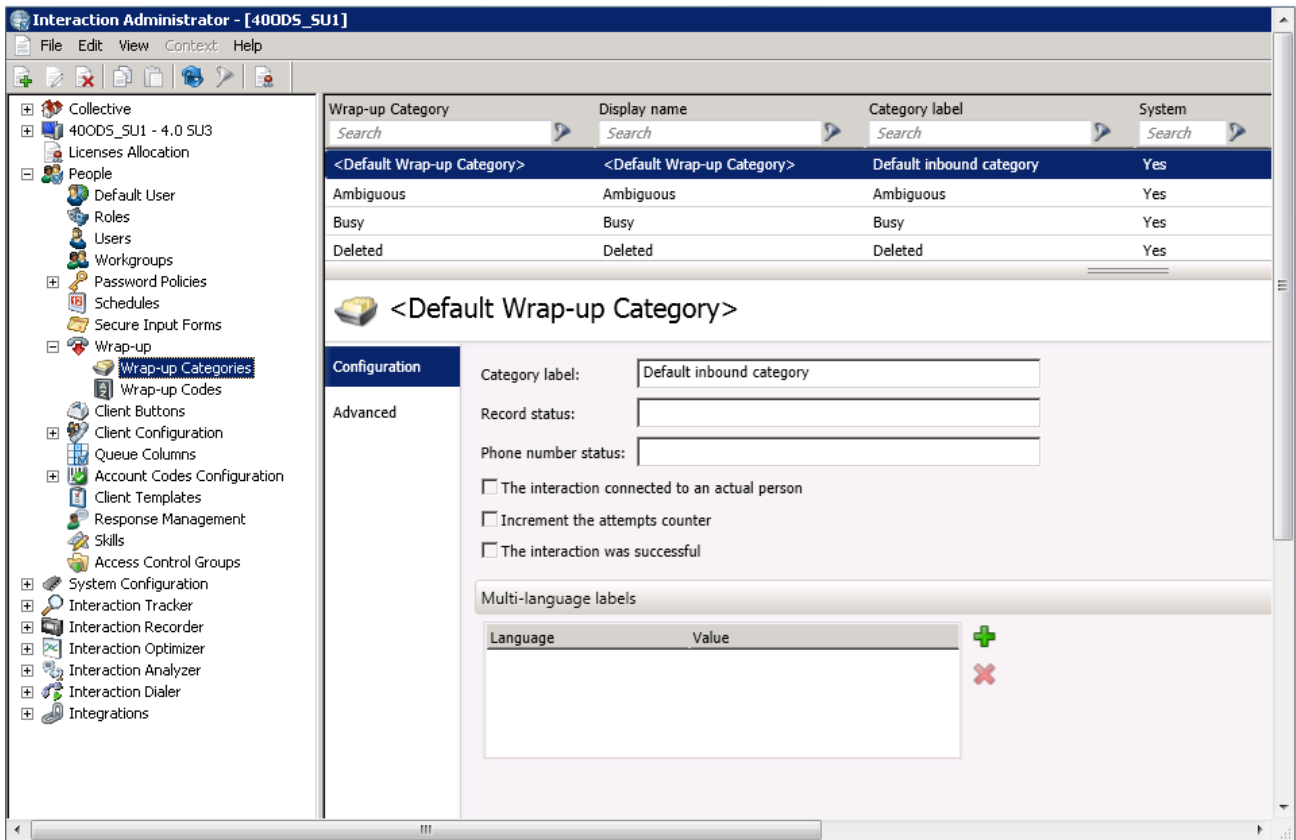
3. Review the Dialer-related Wrap-up Codes in the **People > Wrap-up > Wrap-up Codes** container.
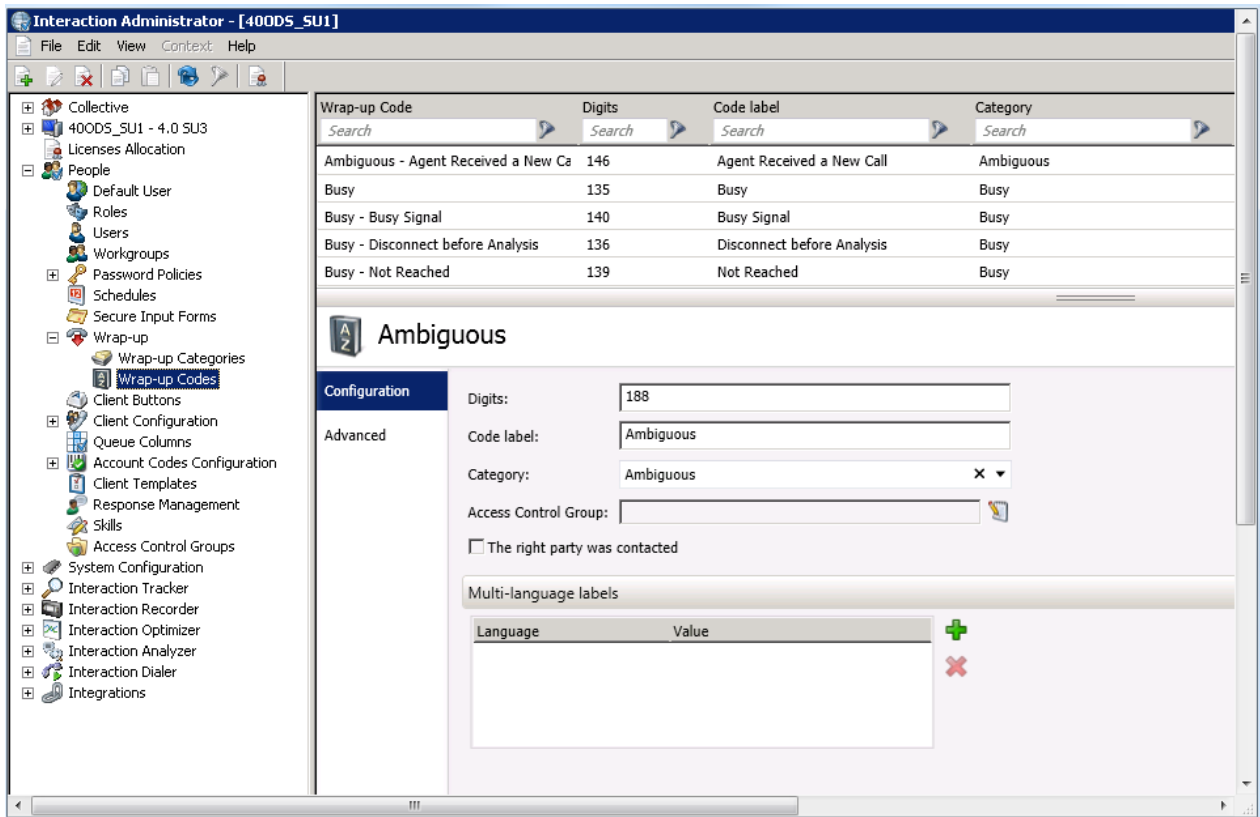
3. Reconfigure policy sets mapped to Reason and Finish Codes to the Wrap-Up Categories and Wrap-Up Codes in the **Interaction Dialer > Advanced Interaction Dialer > Policy Sets** container.
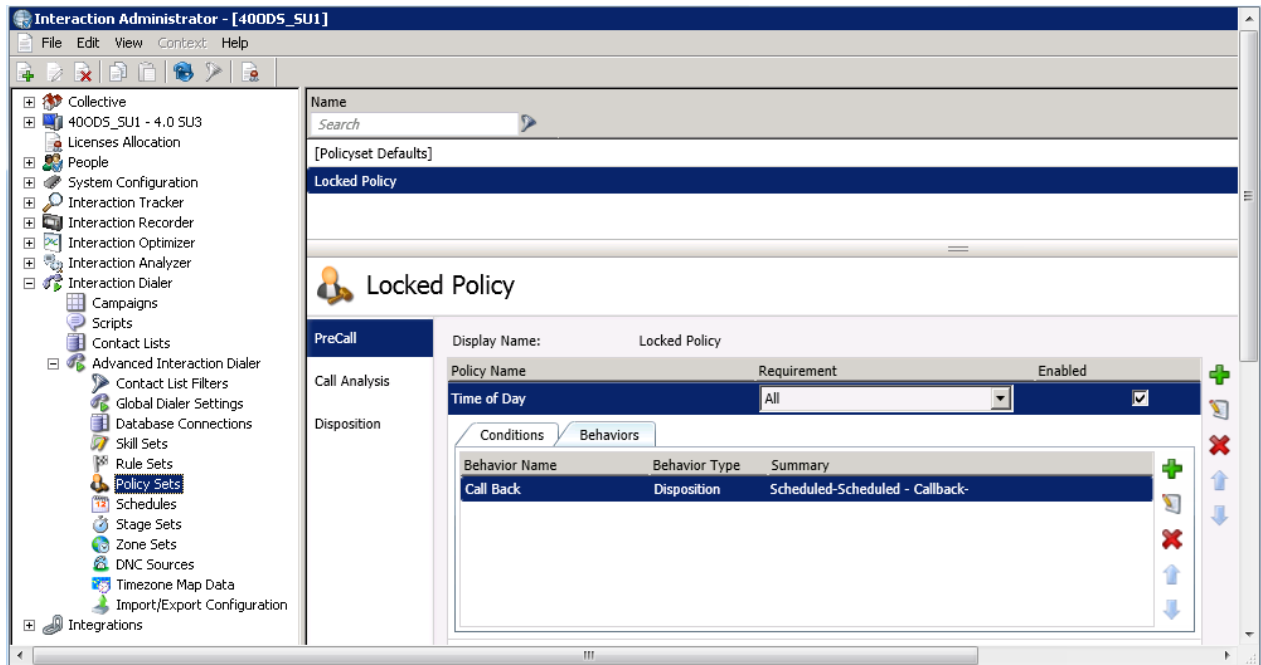
4. Modify base Script dispositions mapped to Reason and Finish Codes to the Wrap-Up Categories and Wrap-Up Codes in the **Interaction Dialer > Scripts** container.
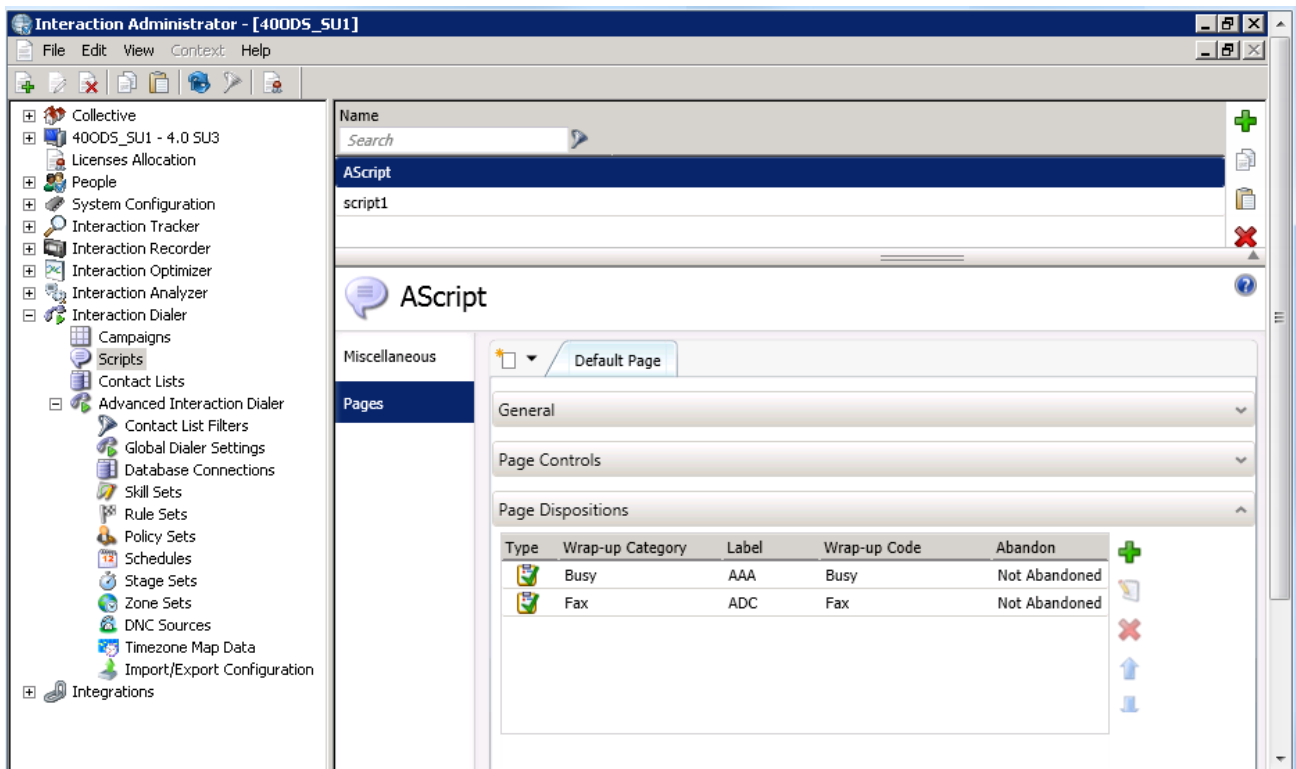
Configure the From email field in Policy and Rule actions

In **Interaction Dialer 2.4** and **3.0**, the Email form in Policy Set behaviors and Rule Set actions did not contain a **From** field. Genesys added this feature in **Interaction Dialer 4.0**. During migration, the system populates the `From` field with the default `Do.Not.Reply@inin.com`. Post-migration, substitute your own email address in the **From** field.

To configure the From email field:

1. Open Interaction Administrator.
2. Configure the `From` email field for Dialer-related Policy Set statistics in the **Interaction Dialer > Advanced Interaction Dialer > Policy Sets** container.
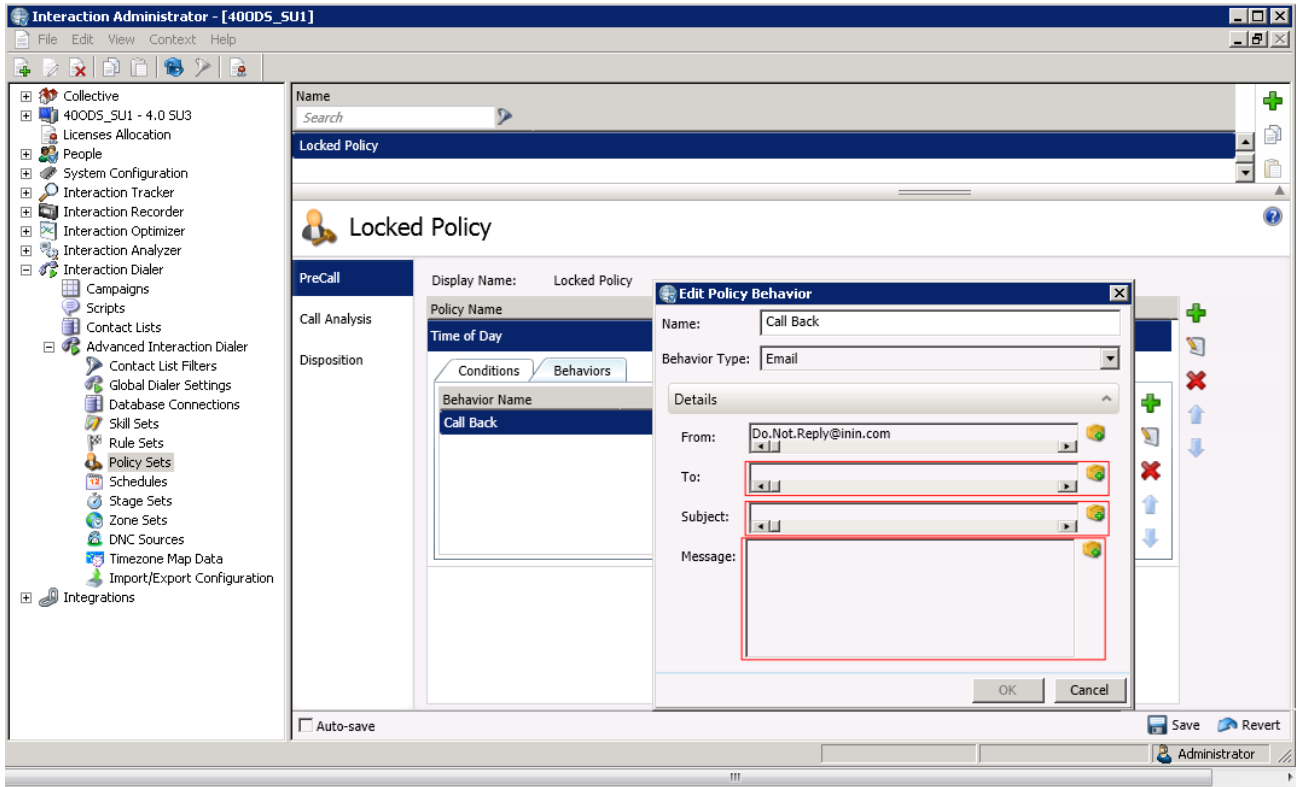
3. Configure the **From** email field for Dialer-related Rule Set statistics in the **Interaction Dialer > Advanced Interaction Dialer > Rule Sets** container.

Reassign access and security rights
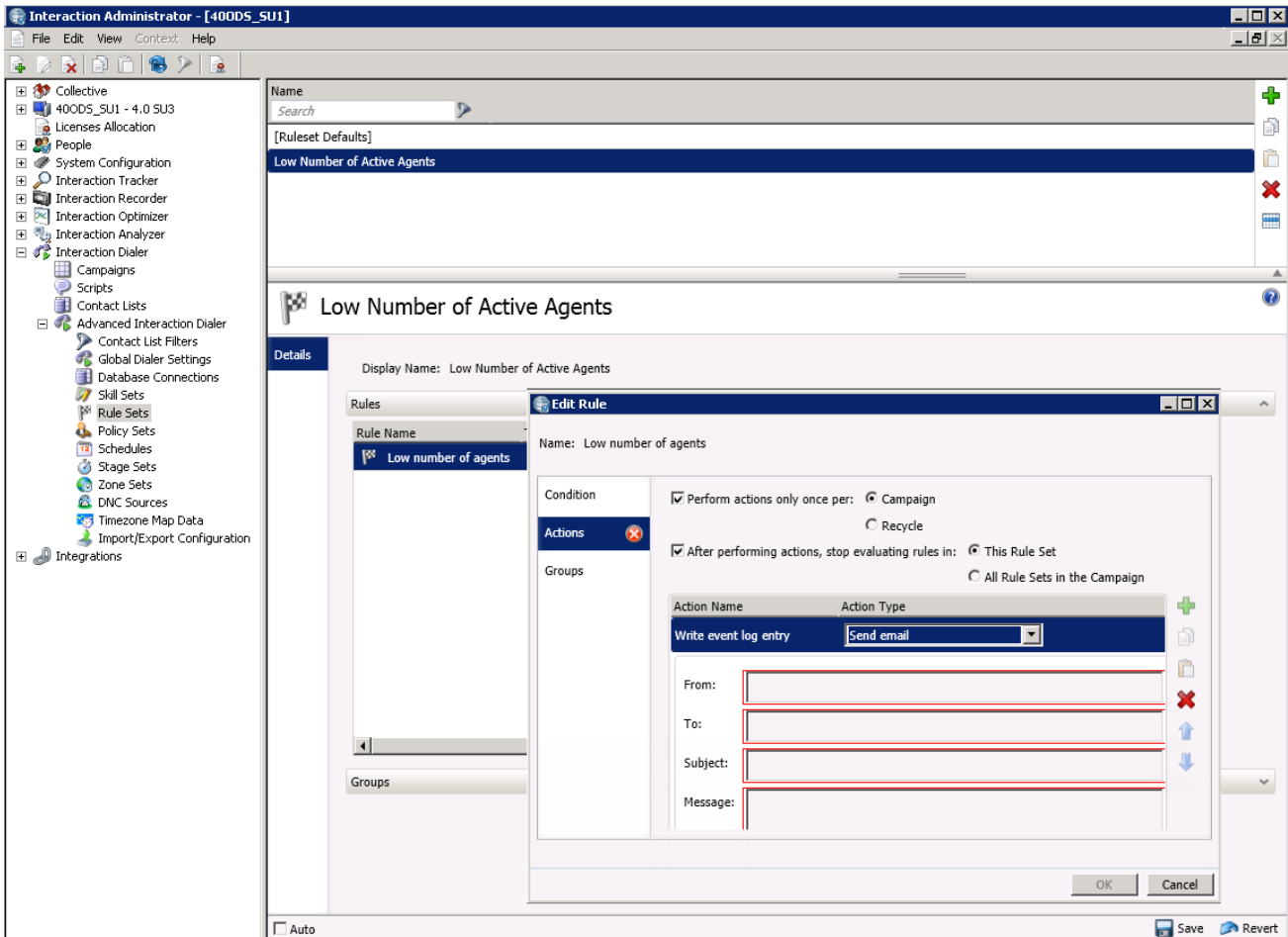
Post-migration, reassign access and security rights to users.

- **Access Control Rights** (ACLs) determine whether a user, workgroup or role can view and modify Interaction Dialer campaigns and Supervisor views. To log on to and access campaigns, agents need view and modify rights to Campaigns access.
- **Security rights** manage the functionality that client applications offer, including the ability to modify or view settings through an application. Access to Interaction Administrator or IC Business Manager applications requires security rights.

To reassign access:
1. Open Interaction Administrator.
2. Open a user, role, or workgroup configuration record.
3. Click the **Security** tab and then click **Access Control**. The **Access Control** dialog box appears.
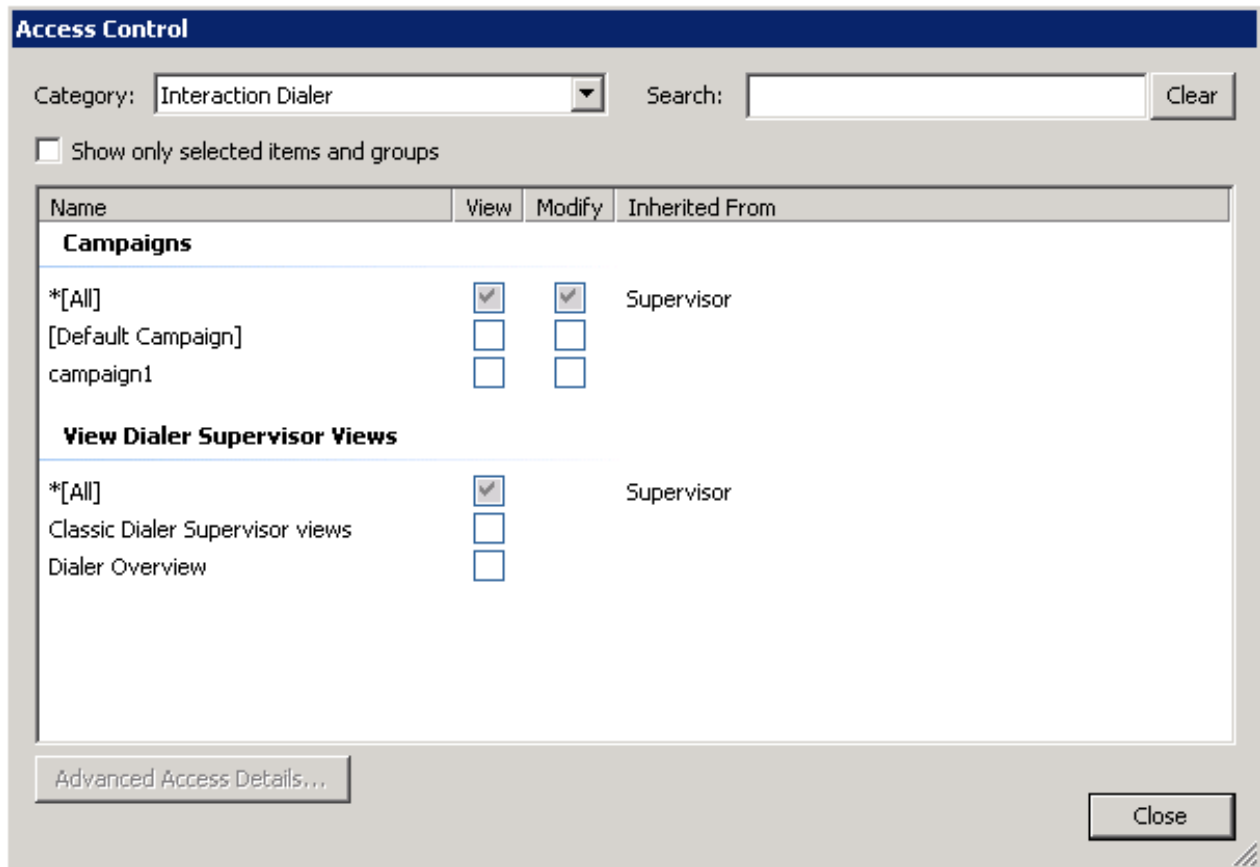
4. In the **Category** list box, click **Interaction Dialer**.
5. Select the **View** and **Modify** check boxes for the campaigns to assign to a user, role, or workgroup.

To reassign security rights:
1. Open Interaction Administrator.
2. Open a user, role, or workgroup configuration record.
3. Click **Security Rights**. The **Administrator Access Rights** dialog box appears.

Security Rights

Category: Application ▼   Search: [   ] [Clear]

☐ Show only selected items and groups

Name	Has Right	Inherited From
Interaction Dialer		
Logon Campaign	☑	Agent
Modify Configuration General	☐	
Modify Preview Call Behavior	☐	
View Configuration General	☐	
View Preview Call Behavior	☐	
View/Modify Contact List Data Query	☐	
Interaction Dialer - Campaigns		
View/Modify Agentless Calling Type	☐	
View/Modify Automatic Time Zone Ma...	☐	
View/Modify Line Settings	☐	
View/Modify Maximum Lines	☐	
View/Modify Status	☐	
Interaction Dialer - Global Dialer Settings		
Modify Change Auditing	☐	
Modify HTTP Server	☐	
Modify Outbound Dialer Servers	☐	
Modify Phone Number Types	☐	
View Change Auditing	☐	
View HTTP Server	☐	
View Outbound Dialer Servers	☐	
View Phone Number Types	☐	
View/Modify Data Connections	☐	
View/Modify DNC Sources	☐	
View/Modify Time Zone Map Data	☐	
Interaction Dialer - Policy/Rule Sets		
View/Modify Custom Handler Actions	☐	
View/Modify Event Log	☐	

[Advanced Access Details...]   [Close]

4. In the **Category** list box, click **Applications** and then use the scroll bar to locate **Interaction Dialer** rights.
5. Select the check box for each security right to grant the user, role, or workgroup.

Assign a configurable priority number to campaigns for multiple campaigns

In **Interaction Dialer 2015 R1 or later,** you can assign priority to specific campaigns. The system places more calls per agent for higher priority campaigns. By default, this number is set to 50.

To change the priority number for a campaign:
1. Open Interaction Administrator.
2. In the **Interaction Dialer >Campaigns** container, select a campaign and in the **Basic Configuration** area.
3. In the **Campaign Priority** area under **Dial Settings**, use the slider bar or the up and down arrows to select the priority number for this campaign.

Modify custom scripts for changes in Dialer 2015 R1 or later

Custom Interaction Scripter scripts don't migrate and require a developer to modify the following:
- Replace references to workflows with campaign objects.
- Remove transitions between campaigns in a workflow.
- Modify scripts that set a reason code to set a wrap-up code instead.
- Modify disposition scripts that set finish codes to assign a wrap-up category code.

For more information on modifying custom scripts, see the *Interaction Scripter Developer's Guide* in the PureConnect Documentation Library.

Recreate Supervisor alerts for Dialer statistics in IC Business Manager (Interaction Supervisor)

Interaction Supervisor alerts set up for Interaction Dialer statistics don't migrate and need recreating. Post-migration, recreate Interaction Dialer statistics alerts in IC Business Manager > Interaction Supervisor.

> **Note:** Do not recreate these alerts until *after* you:

To recreate Interaction Supervisor alerts for Interaction Dialer statistics:

1. Migrate the CIC/Interaction Dialer 3.0 client workstations to the CIC/ Interaction Dialer 2015 R1 or later client workstations.
2. Install the Dialer 2015 R1 or later plug-in for IC Business Manager on client workstations.
3. Create Interaction Dialer statistics alerts. For more information about creating Interaction Dialer statistics alerts, see the *Interaction Supervisor* documentation in the [PureConnect Documentation Library](#).

Migrate CIC 2.4/3.0 Handlers

CIC base handlers change substantially in each release. Before importing CIC configuration data with Interaction Migrator, *inventory each modified base handler.* After importing CIC configuration data, *modify and publish the base handlers* on the new CIC server. Interaction Migrator does not publish or manage custom handlers. Interaction Migrator places the handlers from the export into the designated extraction folder. *Publish and manage custom handlers post-migration* manually.

Interaction Dialer: The procedures for migrating Interaction Dialer handlers are the same as for migrating CIC handlers.

Complete handler pre-migration procedures

When you are preparing to export CIC 2.4/3.0 configuration data, complete the handler pre-migration procedures described in this section.

General methodology

While the migration updates many parts of the system for you, you need to carry forward all handler modifications manually. The best practice is to use the following phased approach:

1. **Inventory** — Inventory all the modified handlers on the server and classify them as either modified base handlers or custom handlers. Modified base handlers are handlers released with the CIC product that you changed. Custom handlers are handlers that you wrote on your own.
2. **Identify** — Identify all the places that contain modified base handlers. Internal documentation following established best practices available on the PureConnect Customer Care website makes this process easier. If you're having difficultly determining these changes, remember to make those notations more clearly when you remake the changes to the CIC 2015 R1 or later handlers.
3. **Understand** — Ensure that you understand why you changed the base handlers or what the function of a custom handler is.
4. **Minimize** — Once you have your list of reasons/changes for modifications, view the feature set added to the new CIC 2015 R1 or later software. It's possible that feature additions such as Interaction Attendant enhancements reduce the list of your handler customizations to carry forward. Maximize your use of Interaction Attendant to minimize future migration efforts.
5. **Re-engineer** — Now that you have your list of modifications to make, recreate those customizations using the new CIC 2015 R1 or later base handler as your building point. Always maximize your use of customization points and encapsulate your changes into subroutines. Reuse custom handlers and subroutine calls when possible.

Complete all these steps as part of your pre-migration procedures using a development environment whenever possible, and then test in that development environment. This process minimizes the chances that your testing on the production servers reveals problems, and ensures a smoother migration.

Plan for base handler modifications

Modified base handlers are handlers released with the product that you then modified.

> **Important!**
> - **CIC 2.4 to 4.0 migrations**. Genesys recommends that you review the relevant feature sets in CIC 3.0 and CIC 4.0, delete duplicate work, and add customization points as needed.
> - **CIC 3.0 to 2015 R1 or later migrations**. Genesys recommends that you review the relevant feature sets in CIC 2015 R1 or later, delete duplicate work, and add customization points as needed.

Inventory each CIC 2.4 or CIC 3.0 base handler that you modified from the released version. If you followed good handler writing practices, you documented the step changes you made to each base handler. You also tried to minimize the impact to the released handlers by compartmentalizing your changes into subroutines.

Create a call flow and redesign the modifications for CIC 2015 R1 or later base handlers. For each modified handler, list your modifications and decide the best way to add this functionality to the equivalent CIC 4.0 base handler. If you added a feature to a CIC 2.4 or CIC 3.0 base handler that is now a base feature in CIC 2015 R1 or later, don't carry over these changes.

Take the time to make your changes as clear and efficient as possible. It saves you time in future migrations or upgrades. Have these changes available before beginning the migration.

After you redesign your handler modifications, make a copy of each equivalent released handler in CIC 2015 R1 or later and save it to a custom directory. Rewrite your modifications into the handler and publish it.

You do *not* back up, open, and publish the CIC 2.4 or CIC 3.0 modified base handlers. Instead, you modify the equivalent CIC 2015 R1 or later released handlers.

Plan for and back up handler customizations

Custom handlers are handlers that you wrote on your own. Determine the custom handlers to upgrade and back them up.

To back up handler customizations:

1. On the CIC 2.4 or CIC 3.0 server, navigate to `\I3\CIC\Handlers\Custom`.
2. Copy the custom handlers to upgrade to any location on or accessible from the CIC server, for example, `\Backup Files\Handlers\Custom`.

Determine which handlers have changed

After you back up the CIC 2.4 or CIC 3.0 custom handlers and install CIC 2015 R1 or later on the CIC 2015 R1 or later server, run the Handler Diff tool in Interaction Designer. The tool indicates what changed between the CIC 3.0 custom handlers and their corresponding CIC 2015 R1 or later handlers.

The Handler Diff tool outputs to an XML file that lists the differences between the two sets of handlers. Optionally, you can specify an XSL file that customizes the display of the resulting diff XML file into a more readable form.

To run the Handler Diff tool:

1. Close all open handlers in Interaction Designer.
2. From the **Utilities** menu, click **Power Tools** and then click **Handler Diff**. The **Handler Diff** dialog box appears.
3. Under **"Old" Handler List**, click **Browse** and then specify the folder that contains the set of the original handlers to use. After you select the folder, the Handler Diff tool populates the Old list with the .ihd files found in that folder.
4. Under **"New" Handler List**, click **Browse** and then specify the folder that contains the set of the original handlers to compare with the Old Handler List.
5. Clear the check box for any handlers that you do not want to process. Each list has a check box that checks only those handlers that exist in the other list. The check boxes are: **Check only handlers that are checked in "New"** list and **Check only handlers that are checked in "Old"** list.
6. On the **Diffs to Perform** tab in the lower portion of the dialog box, clear the check box for any diffs that you do not want to do. This tab lists all the handler attributes that you can compare. When you click a diff, a description of that diff appears in the **Diff description** portion of the dialog box. Click **Check All Diffs** to select all diffs at once.
7. To change the location of the output diff XML file, click the **Output Location** tab. Click **Pick output XML file** and specify where to write the diff output XML file.
8. To customize the output with an XSL file, click the **Output Formatting** tab, select **Add XSL stylesheet to customize handler diff XML output**, and then select the appropriate `.XSL` file from the list.

   `GeneralHandlerDiffOverview.xsl` is a sample, non-localized file installed in `\CIC\Server\HandlerDiff\XSLFiles` that gives an example of how you can use an XSL file to customize the output. If you decide to use an XSL file to customize the output, the location of the style sheet writes directly into the diff results XML file with a `"<?xml-stylesheet"` processing instruction at the top. If you give the output XML file to another user, ensure that the XSL file exists where specified in the XML file so that the output displays correctly.
9. Click **Run Handler Diff** to start the comparison.

   When the diff operation completes, the diff tool opens Internet Explorer to display the resulting XML file. If you specified an XSL sheet to use to customize the output, when Internet Explorer opens the file, you might see an error message. The message is, "To help protect your security, Internet Explorer has restricted this file from showing active content that could access your computer. Click here for options…" If this message appears, click the message and then click **Allow Blocked Content** to display the information.
10. Click a handler name in the left column to display the diff results for that handler in the right column.
11. Once you determine the differences, replace any toolsteps that changed, compare the inputs and outputs, and publish them. For instructions, see Handler post-migration procedures.

Back up most recently published handlers

It is good practice to make a backup directory of the most recently published version of every handler published on the system.

To back up most recently published handlers:

1. On the CIC 2.4 or CIC 3.0 server, navigate to `\I3\CIC\Server\Handlers`.
2. Copy the `*.ihd` files from this directory to a backup directory, for example, `\Backup Files\Handlers\Running Handlers`. This directory is your backup directory and contains a copy of the most recently published version of every handler published on this system.

   If (after opening, publishing, and modifying the handlers that you migrated), you are missing some functionality from the old version, double-check your work against the handlers in this backup directory.

Complete handler post-migration procedures

After you import CIC 2.4/3.0 configuration data, complete the handler post-migration procedures described in this section. You need a plan for these procedures, as described in Handler pre-migration procedures.

Open and publish custom-written handlers

To open and publish custom-written handlers:

1. Create the directory `\I3\CIC\Handlers\Custom\ToBeMigrated`.

2. *If you completed a new CIC 2015 R1 or later installation* directly on the CIC server, you should have already copied all handlers in the `\I3\CIC\Handler\Custom` directory to a backup location. Leave the handlers in the backup location untouched as your record to refer to in the event of a problem. *Move* all the handlers in the `\I3\CIC\Handlers\Custom` to the `\I3\CIC\Handlers\Custom\ToBeMigrated` directory.

3. Migrate each handler one at a time. For each handler that is custom (a user-created handler/subroutine not based on any base handler), *move* the handler from the `\ToBeMigrated` directory to the parent `\Custom` directory.

4. *Resolve* as many *toolstep changes* as possible before publishing:

    - Open the handler in Interaction Designer. Note any gray (missing icon) steps, which indicate a toolstep changed.
    - Drop the new version of the toolstep out of the tool palette and integrate it into the handler in place of the old step. Carefully carry over the old parameters, and note parameters to add or remove.
    - Use the Dependency Viewer to identify deprecated tools. In Interaction Designer, choose **Utilities….View Dependencies…** from the menu. In the Dependency list box, click **Tools in Handlers.** Choose to group by **supporting handler**. Look for tools listing in this format: ***Tool Category:ToolName***, for example: **ExchangeTools:SendEmail**. These tools work correctly but you need to update them to new tools eventually.
    - If using a tool that requires the email address, look up the `EmailAddress` attribute instead of the `Mailbox` attribute and pass the `EmailAddress` value into the tool.

5. *Save and Publish* the newly migrated CIC 2015 R1 or later handler. During the publishing process, if a tool's parameters, exit paths, or both changed since the previous release, an error message appears. The message displays the tool's Step Label and Node ID, and attempts to explain the problem.

    If an error occurs, change the affected tool in Interaction Designer to publish the handlers successfully:

    - Use the Step Label, Node ID, and error message text to locate the step and diagnose the problem.
    - Change the tool as necessary to solve the problem. For example, create a variable to contain the value of the parameter, or create a link from the new exit path.
    - Save the handler and try publishing again.

    If you are still unable to solve the problem, contact PureConnect Customer Care.

6. Repeat steps 3 through 5 until you publish all custom handlers.

Modify and publish CIC 2015 R1 or later base handlers (including customization points)

Modify the appropriate **CIC 2015 R1** or later shipping handlers based on your modifications to CIC 2.4 or CIC 3.0 handlers.

To modify CIC 2015 R1 or later base handlers:

1. *To prevent overwriting* the CIC 4.0 base handlers, locate the `\I3\CIC\Handlers\30Handlers` directory, and set the **Read Only** file attribute on the handlers in this directory.

2. Migrate each handler one at a time. For each handler remaining in the `\I3\CIC\Handlers\Custom\ToBeMigrated` directory, locate the handlers in the `\I3\CIC\Handlers\40Handlers` directory that corresponds to it. *Copy* the CIC 2015 R1 or later version of the handler to `\I3\CIC\Handlers\Custom`.

3. Open the handler you just copied to the `\Custom` directory and the matching version in the `\ToBeMigrated` folder in Interaction Designer. *Rewrite your modifications* to the CIC 2.4 or CIC 3.0 version into the CIC 2015 R1 or later version. You should have already determined your plan for the modifications, as described in [Handler pre-upgrade procedures](#). If you are missing functionality from the CIC 2.4 or CIC 3.0 version, double-check your work against the handlers in the most recently published handler backup directory in `\Backup Files\Handlers\Running Handlers`.

4. *Resolve* as many *toolstep changes* as possible before publishing *each* of the custom handlers in `\I3\CIC\Handlers`:
   - Open the handler in Interaction Designer. Note any gray (missing icon) steps, which indicate a toolstep changed.
   - Drop the new version of the toolstep out of the tool palette and integrate it into the handler in place of the old step. Carefully carry over the old parameters, and note parameters to add or remove.
   - Use the Dependency Viewer to identify deprecated tools. In interaction Designer, choose **Utilities…View Dependencies…** from the menu. In the **Dependency** list box, click **Tools in Handlers**. Choose to group by **supporting handler.** Look for tools listing in this format: **Tool Category:ToolName,** for example: **ExchangeTools:SendEmail**. Though the tools work correctly, you need to update to new tools eventually.
   - If using a tool that requires the e-mail address, look up the `EmailAddress` attribute instead of the `Mailbox` attribute and pass the `EmailAddress` value into the tool.

5. *Save and Publish* the newly modified CIC 2015 R1 or later base handler in the `\Custom` folder (which is where you opened it from). During the publishing process, if a tool's parameters, exit paths, or both changed since the previous release, an error message appears. The message displays the tool's Step Label and Node ID, and attempts to explain the problem.

   If an error occurs, change the affected tool in Interaction Designer to publish the handlers successfully:
   - Use the Step Label, Node ID, and error message text to locate the step and diagnose the problem.
   - Change the tool as necessary to solve the problem. For example, create a variable to contain the value of the parameter, or create a link from the new exit path.
   - Save the handler and try publishing again.

   If you are still unable to solve the problem, contact PureConnect Customer Care.

6. *Delete* the copy in the `\ToBeMigrated` folder.

Migrate CIC 3.0 Managed IP Phones

This section describes the migration of managed IP phones from a CIC 3.0 server environment to a CIC 2015 R1 or later server environment. You can configure the managed IP phones either manually or programmatically using a DHCP custom option, DNS Host (A) record, or the IP address of the CIC 2015 R1 or later server. For more information, see the *CIC Managed IP Phones Administrator's Guide* in the [PureConnect Documentation Library](#).

Support for migrating CIC 3.0 managed IP phone types to CIC 2015 R1 or later

The migration package supports migrating CIC 3.0 managed IP phones from a CIC 3.0 system to a CIC 2015 R1 or later system.

Of the three managed IP phone types:
- Genesys tested and documented the migration of CIC 3.0 managed Polycom phones to CIC 2015 R1 or later for the current release of the migration package.
- Genesys plans to test and document the migration of CIC 3.0 managed Interaction SIP Station and SIP Soft Phones to CIC 2015 R1 or later in a future migration package release.

Recommendations for non-managed IP phones

If you are a CIC 2.4 site or a CIC 3.0 site with non-managed IP phones, review the recommendations in this section.

Recommendations for IP phone models supported in CIC 2015 R1 or later

If Genesys supports your IP phone model (s) as a managed IP phone in CIC 2015 R1 or later, Genesys recommends *converting to or creating managed IP phones*. Check the Testlab site at http://testlab.genesys.com to determine whether Genesys supports your IP phone model(s) as a managed IP phone in CIC 2015 R1 or later.

Convert existing non-managed IP phones to managed IP phones

For CIC 3.0 sites, follow the procedures in "Create managed IP phones from existing (Polycom) SIP stations" in the *CIC Managed IP Phones Administrator's Guide* in the CIC 3.0 Documentation Library that is available on your CIC server. Completing this step well in advance of the CIC 2015 R1 or later migration process helps to simplify the scope of the migration effort.

For CIC 2.4 sites, convert your phones to managed phones after you import them into CIC 2015 R1 or later as part of the migration. See "Create managed IP phones from existing (Polycom) SIP stations" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library.

Create managed IP phones

Create Managed IP Phones in CIC 2015 R1 or later following the procedures in "Create multiple managed IP phones" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library. Then, point the phones to the new CIC 2015 R1 or later server. For assistance, contact PureConnect Customer Care.

Recommendations for unsupported IP phone models or to continue using non-managed IP phones

If Genesys doesn't support your IP Phone model as a managed phone in CIC 2015 R1 or later, or you want to continue using a supported phone as a non-managed phone, Genesys recommends that you verify your firmware version manually and update your TFTP/FTP/HTTP server with the appropriate firmware version for your devices.

For devices certified for use with CIC, you can obtain the newest supported firmware from the Testlab site at http://testlab.genesys.com. For non-certified devices, contact your vendor.

Identify imported managed IP phones

During the import of your managed IP phones, Interaction Migrator appends **_migrated** to the name of a registration group. This name change helps you identify an imported registration group in the Managed IP Phones container in Interaction Administrator.

Polycom firmware requirements

CIC requires a minimum Polycom firmware version that the Provision Server communicates with to manage stations. Ensure that your Polycom phones are running the appropriate firmware:

- **Polycom IP300 and IP500 phones:** Version 2.1.3 or higher.
- **All other Polycom phones:** Version 3.0.3B (ideally, version 3.1.2) or higher.

> **Note:** If you are using managed IP Phones in CIC 3.0, you should be on the correct firmware, as each CIC 3.0 Service Update includes the firmware.

Verify that your phones are running the correct version. The version for each phone is in the **Software Version** column in the **Managed IP Phones** container in Interaction Administrator. In the **Managed IP Phones** container in Interaction Administrator, verify that you meet the minimum firmware version by checking the **Phone** and **Software Version** columns.

If your Polycom firmware is not on the minimum version and you need help upgrading your Polycom firmware, contact PureConnect Customer Care.

Supported Polycom phone models and firmware

For more information about:

- Supported Polycom phone models and firmware, see the Testlab site at http://testlab.genesys.com/.
- Polycom model and firmware limitations, see "Additional configuration (Polycom)" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library.

Options for pointing phones to the CIC 2015 R1 or later server

You can use the following methods to point the managed IP phones to the CIC 2015 R1 or later server:

- **DHCP custom option** (recommended): This option offers the most flexibility and allows you to point phones to different CIC 2015 R1 or later servers.
- **DNS Host (A) record:** This option is simpler to do than the DHCP custom option; however, it is a global change that affects all phones at once.
- **Manual configuration:** This option is useful for configuring individual test phones; however, it is not a practical option for full deployment of your managed IP phones.

Though Genesys recommends using the DHCP custom option, determine the method that best suits your situation.

Point the phones to the CIC 2015 R1 or later server

Complete the appropriate procedure to point the phones to the CIC 2015 R1 or later server.

> **Important!**
> Ensure that you complete the procedure only for the phones that you are ready to move.

Create a DHCP custom option (recommended)

Complete these steps to use a DHCP custom option to point the phones to the CIC 2015 R1 or later server.

To create a DHCP custom option:

1. Create a DHCP option in the custom range (225 for example), and set it up just like an option 160, but point it to the CIC 4.0 servers. For more information, see "Configure the network for managed IP phones" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library.

2. To move the Polycom phones on the CIC 3.0 server to the CIC 2015 R1 or later server, do the following:

   a. Create a text file called `push40.cfg` as an example and place it in the `\i3\ic\provision\polycom` directory on the CIC 3.0 server.

   b. Place the following in the file, changing 225 to whatever value that you used in DHCP:

      ```
      <device
      device.set="1"
      device.dhcp.bootSrvOpt="225"
      device.dhcp.bootSrvOpt.set="1"
      device.prov.tagSerialNo="1"
      device.prov.tagSerialNo.set="1">
      </device>
      ```

      This command tells the phone to set a new value (write it to flash), the value to set, what to set it to, and to commit that value.

   c. Set the phones to move to the new server to use this value. Set a custom configuration file parameter in IA on the 3.0 server that points to this file called `config_files`, and point it to the file you created previously. For more information, see "Additional configuration (Polycom)" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library. You can set this value on multiple phones at the same time using multi-select to select several phones in the Interaction Administrator Managed Phones container, and then right-clicking. CIC 3.0 SU 12 introduced this feature. You can modify multiple phones at the same time.

   d. Trigger the configured phones to reload. The phones load the configuration, and change the settings to the new DHCP option, and get their information from there instead.

      For more information about moving Polycom phones, see "Additional configuration (Polycom)" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library.

3. To revert the Polycom phones to the CIC 3.0 server, do the following:

   a. Remove the `config_files` from the phones on the CIC 3.0 server, then either change back the option on the phones, or set up a `pushbackto30.cfg` file on the CIC 2015 R1 or later server and restart the phones. You construct this file similarly to the one created to merge the phone to the CIC 2015 R1 or later server. The `pushbackto30.cfg` file is just like the `push40.cfg` file you created in step 2a, except you use option 160 instead of option 225.

   b. Create a text file called `pushbackto30.cfg` as an example and place it in the `\i3\ic\provision\polycom` directory on the CIC 2015 R1 or later server.

   c. Place the following in the file to set the phones back to option 160, or whatever value you were using:

      ```
      <device
      device.set="1"
      device.dhcp.bootSrvOpt="160"
      device.dhcp.bootSrvOpt.set="1" >
      </device>
      ```

      This command tells the phone to set a new value (write it to flash), the value to set, what to set it to, and to commit that value.

   d. Set the phones you want to move back to the old server to use this value. Set a custom configuration file parameter in Interaction Administrator on the CIC 4.0 server that points to this file called `config_files`, and point it to the file you created previously.

   e. Trigger the configured phones to reload. The phones load the configuration, and change the settings to the new DHCP option, and get their information from there instead.

4. For the Interaction SIP Station device, to move the phones on the CIC 3.0 server to the CIC 2015 R1 or later server, do the following:
   a. Change the phones in Interaction Administrator one at a time or in bulk and set the DHCP option value under Advanced Options to the value you want to use.
   b. Trigger the configured phones to reload. The phones load the configuration, and change the settings to the new DHCP option, and get their information from there instead.

   > For more information about the Interaction SIP Station device, see "Additional configuration (Interaction SIP Station)" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library.

5. To revert the phones back to the CIC 3.0 server, do the following:
   a. Change the DHCP option parameter on both the CIC 3.0 and CIC 2015 R1 or later servers.
   b. Restart the phones. The phones load the configuration, and change the settings back to the old DHCP option, and get their information from there instead.

> **Notes:**
> - After you complete your migration, change the DHCP option 160 to point to the CIC 2015 R1 or later server. Phones that don't exist on the CIC 3.0 server's configuration go to the right location out of the box.
> - To add (deploy) Polycom handsets during this transition time, the simplest method is to change the phone locally to the new option value. To deploy multiple phones, you can deploy a TFTP server in a staging environment and use a global (`000000000000.cfg`) file to set phones before deploying them to the desktop. For assistance, contact PureConnect Customer Care.

Create a DNS Host (A) record

Complete the following standard procedures to use a DNS Host (A) record to point to the CIC 2015 R1 or later server, as described in "Configure the network for managed IP phones" in the *CIC Managed IP Phones Administrator's Guide* in the PureConnect Documentation Library:
- Create DNS Host (A) records for servers in the DNS voice domain
- Create DNS Host (A) records for Switchover (Polycom and ISS)

Configure managed IP phones manually

To change the settings on your managed IP phones manually, create a second DHCP custom option or create a second DNS Host (A) record.

Create a second DHCP custom option

To create a second DHCP custom option:
1. Create a second DHCP custom option or change the existing DHCP custom option on the DHCP server, as described in Create a DHCP custom option.
2. For each managed IP phone, do the following:
   a. On the phone, select **Menu** > **Settings** > **Advanced**.
   b. In the **Password** box, type `456` and select **Enter**.
   c. Select **Admin Settings** > **Network Configuration** > **DHCP Menu**.
   d. Ensure that Boot Server is set to **Custom + Opt. 66** or **Custom**.
   e. Ensure that **BootSrv Opt** is set to the number specified for the DHCP custom option.
      > **Note:** You set this number when you created the DHCP custom option.
   f. Ensure that **BootSrv Type** matches the type specified for the DHCP custom option.

Create a second DNS Host (A) record

To create a second DNS Host (A) record:

1. Create a second DNS Host (A) record or change the existing DNS Host (A) record, as described in Create a DNS Host (A) record.

2. For each managed IP phone, do the following:

   a. On the phone, select **Menu** > **Settings** > **Advanced**.

   b. In the **Password** box, type `456` and select **Enter**.

   c. Select **Admin Settings** > **Network Configuration** > **Server Menu**.

   d. Change **Server Type** to **HTTP**.

   e. Change **Server Address** to the FQDN of the Host (A) record associated to the CIC 4.0 server (for example, http://provision40.example.com:8088).

Migrate Interaction Media Server 3.0

This section describes the options and procedures for migrating Interaction Media Server 3.0 configuration data to Interaction Media Server 4.0.

Review Interaction Media Server 3.0 to 2015 R1 or later migration options

Interaction Media Server 3.0 is not compatible with CIC 4.0. You need to upgrade existing Interaction Media Servers to Interaction Media Server 2015 R1 or later.

The current release of the migration package supports migrating Interaction Media Server 3.0 configuration data to Interaction Media Server 2015 R1 or later in the following scenarios:

- New Interaction Media Server 2015 R1 or later appliance
- Existing Interaction Media Server G6 3.0 appliance upgraded to 2015 R1 or later
- Existing Interaction Application Server (IAS) G7 or CIC Server G7 3.0 appliance used as Interaction Media Server upgraded to 4.02015 R1 or later

Each scenario uses Interaction Migrator to export and import migrating Interaction Media Server 3.0 certificate, configuration data, and resources to Interaction Media Server 2015 R1 or later. For existing 3.0 Interaction Media Server appliances, you use other utilities to upgrade the appliance to Interaction Media Server 2015 R1 or later.

New Interaction Media Server 2015 R1 or later appliance

In this scenario, you install the Interaction Media Server 4.0 software on one of the following:

- An Interaction Media Server 2015 R1 or later appliance purchased from Genesys
- Certified hardware that meets the minimum requirements for Interactive Media Server 2015 R1 or later

One advantage to installing a new Interaction Media Server 2015 R1 or later is the ability to test the Interaction Media Server 2015 R1 or later while the Interaction Media Server 3.0 is running in production. However, you must still be running CIC 3.0 in production along with the Interaction Media Server 3.0 because CIC 2015 R1 or later is not compatible with Interaction Media Server 3.0.

Existing Interaction Media Server G6 3.0 appliance upgraded to 2015 R1 or later scenario

In this scenario, you upgrade an existing Interaction Media Server 120 G6 or Interaction Media Server 160 G6 3.0 appliance to 2015 R1 or later using the MSSP Upgrade Kit. You can obtain the appropriate upgrade kit (small MSSP 4.0 Upgrade Kit for 120 G6 servers and Medium MSSP 4.0 Upgrade Kit for 160 G6 servers) from your partner, or online at https://order.inin.com/Start.asp. After you complete the upgrade kit instructions, the server is running Windows 2008 R2 Telecom edition with Interaction Media Server 2015 R1 or later.

When you turn an existing Interaction Media Server 3.0 into an Interaction Media Server 2015 R1 or later, plan one to two hours of downtime to upgrade the operating system and move files.

Existing Interaction Application Server (IAS) G7 or CIC Server G7 3.0 appliance used as Interaction Media Server upgraded to 2015 R1 or later

In this scenario, you upgrade an existing (IAS) or CIC Server G7 3.0 appliance used as Interaction Media Server to 2015 R1 or later with an internal USB key following the steps in the *Factory Image Restoration Procedures Technical Reference*. After you complete the Factory Image Restoration procedures, the server is running Windows 2008 R2 Telecom edition with Interaction Media Server 2015 R1 or later.

When you turn an existing Interaction Media Server 3.0 into an Interaction Media Server 2015 R1 or later, plan one to two hours of downtime to upgrade the operating system and move files.

Interaction Media Server 2.4 considerations

Existing Interaction Media Server G5 and G6 2.4 appliances meet the minimum hardware requirements to support Interaction Media Server 4.0. However, there is no migration path for their configuration because *Interaction Migrator does not support exporting Interaction Media Server 2.4 configuration*.

The only upgrade path currently available is to wipe the server clean and follow the procedures outlined in the *Interaction Media Server Technical Reference* in the PureConnect Documentation Library to install a new *software only* media server, including reconfiguring the server manually.

Before you begin the migration

Before you begin the migration, complete the Interaction Media Server migration requirements:

- Establish an inventory of the software installed on Interaction Media Server 3.0 and determine which software it uses currently, including Interaction Media Server, Interaction SIP Proxy, Interaction Recorder Remote Content Server, and off-server Session Manager.
- Obtain upgraded 4.0 license(s) for any PureConnect products installed on Interaction Media Server 3.0 as described in Migration Planning.
- **Interaction Media Server G6 only:** Obtain the upgrade kit from Genesys and locate the *Upgrade Kit Instructions*. The upgrade kit includes a new USB key and a license for Windows 2008 R2 Telecom edition.

   > **Note:** You can obtain the appropriate upgrade kit (**Small MSSP 4.0 Upgrade Kit for 120 G6 servers** and **Medium MSSP 4.0 Upgrade Kit for 160 G6 servers**) from your partner, or online at https://order.inin.com/Start.aspx.

- **Interaction Media Server G6, Interaction Application Server G7, or CIC G7 Server only:** Obtain the *Factory Image Restoration Procedures Technical Reference*.
- Determine the computer name to use when the server is running Interaction Media Server 2015 R1 or later. To simplify the migration process, use the same name that the computer had when running Interaction Media Server 3.0. To change the name, follow the procedure for generating new certificates in Complete post-migration procedures.

Install Interaction Migrator on Interaction Media Server 3.0

Interaction Migrator exports and imports Interaction Media Server 3.0 certificate, configuration data, and resources to Interaction Media Server 2015 R1 or later.

Install Interaction Migrator on Interaction Media Server 3.0 as described in Interaction Migrator Installation. Ensure that you install the appropriate version of Interaction Migrator as described in Install Interaction Migrator and https://my.inin.com/products/cic/Pages/Migrations.aspx.

Export Interaction Media Server 3.0 configuration data

This section describes exporting Interaction Media Server 3.0 configuration data using Interaction Migrator 2015 R1 or later. Use Interaction Migrator to export the Interaction Media Server 3.0 configuration. Save the exported data to an external location.

> **Note:** Ensure that the export file name contains the name of your Interaction Media Server.

To export Interaction Media Server 3.0 configuration data:

1. Start Interaction Migrator 4.0 on the Interaction Media Server 3.0, either from the Interaction Migrator **link on the desktop**, or from **Start -> Programs -> PureConnect -> Interaction Migrator**.
2. On the **Welcome** page, click **Next**.
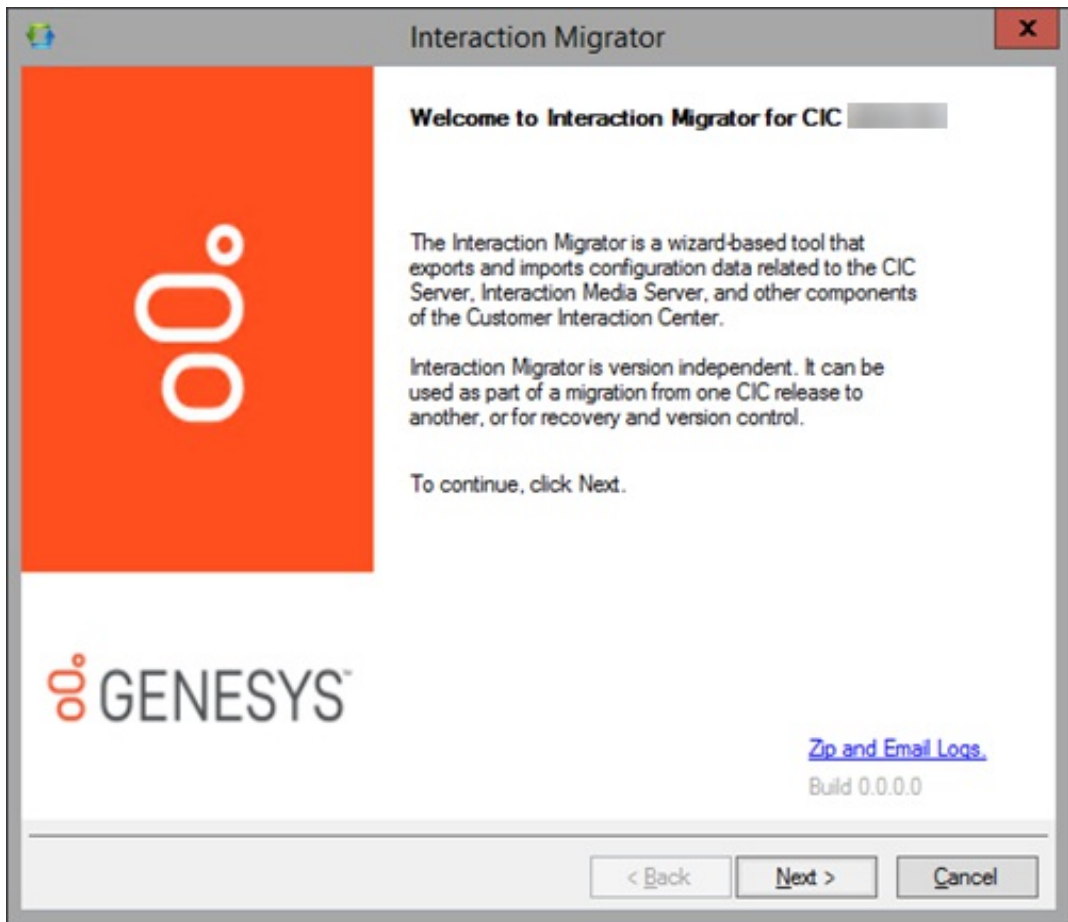
Note: If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.
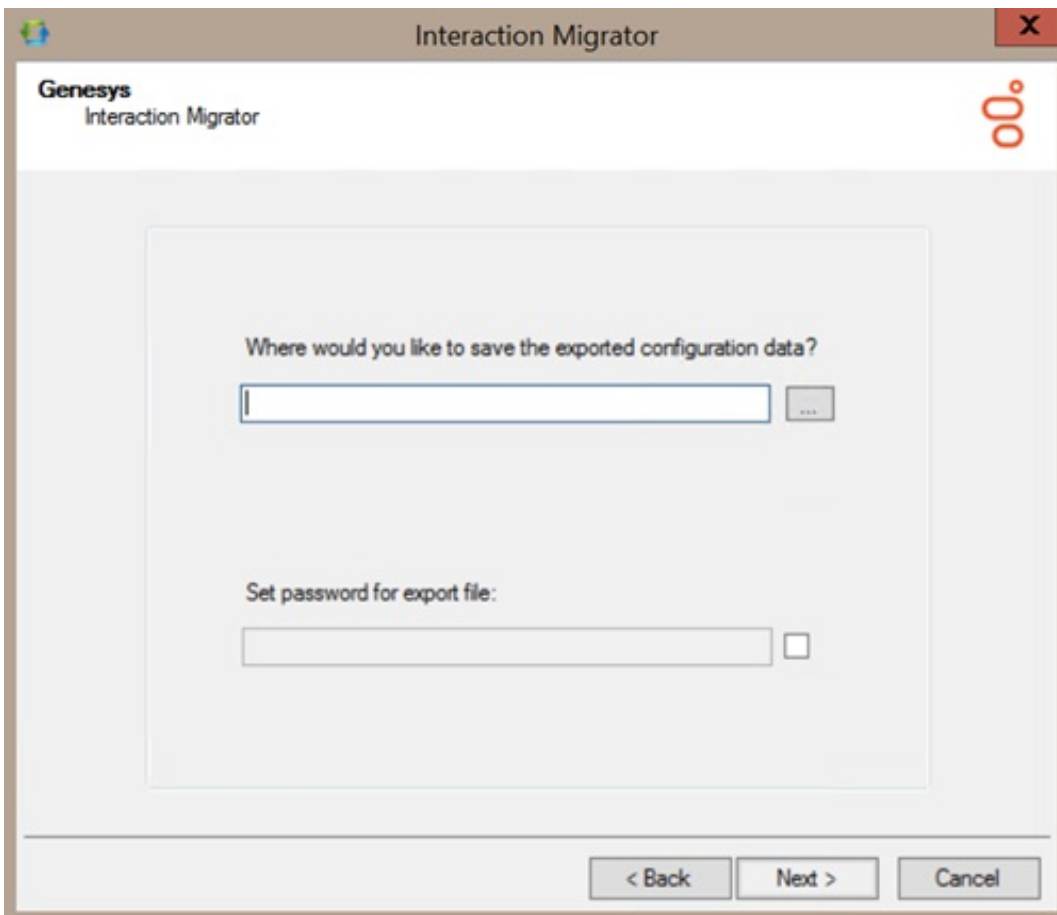
3. On the **Task Selection** page, click **Export configuration data** and then click **Next**.
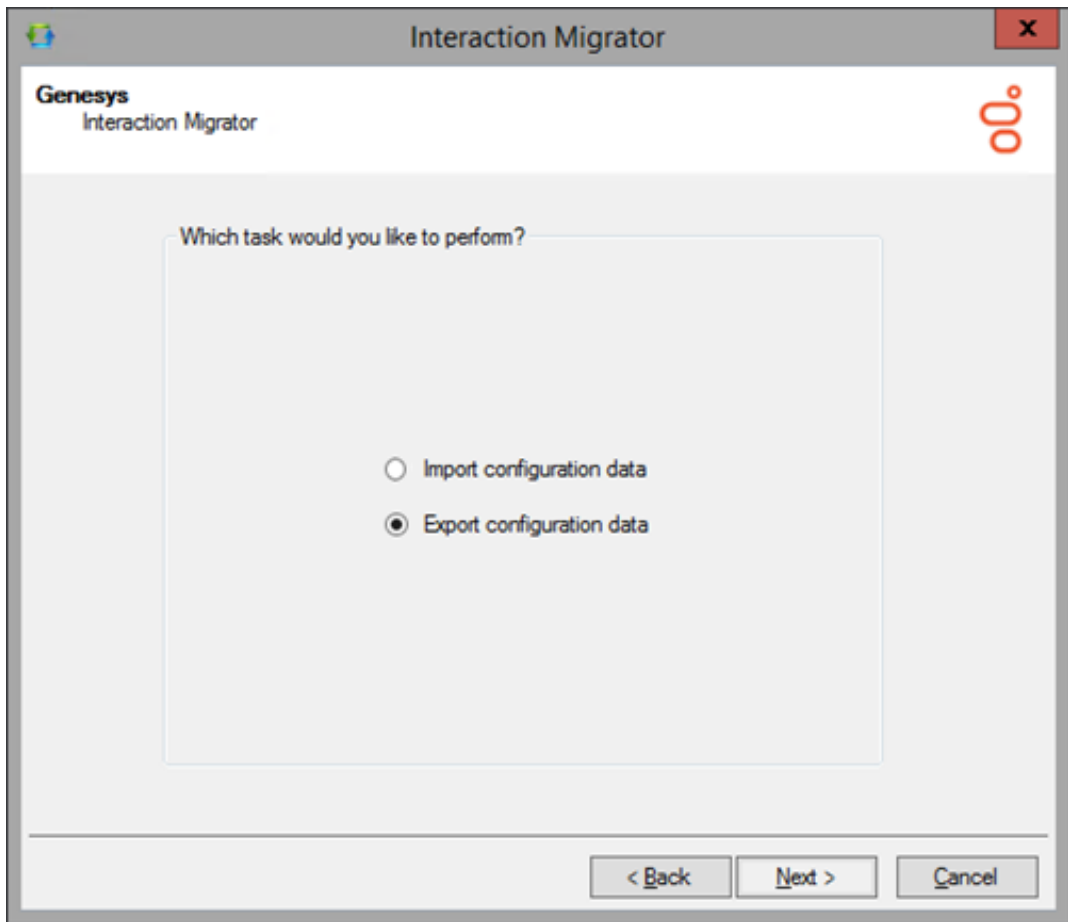
4. On the **Data Component Selection** page, select the **Select All** check box.
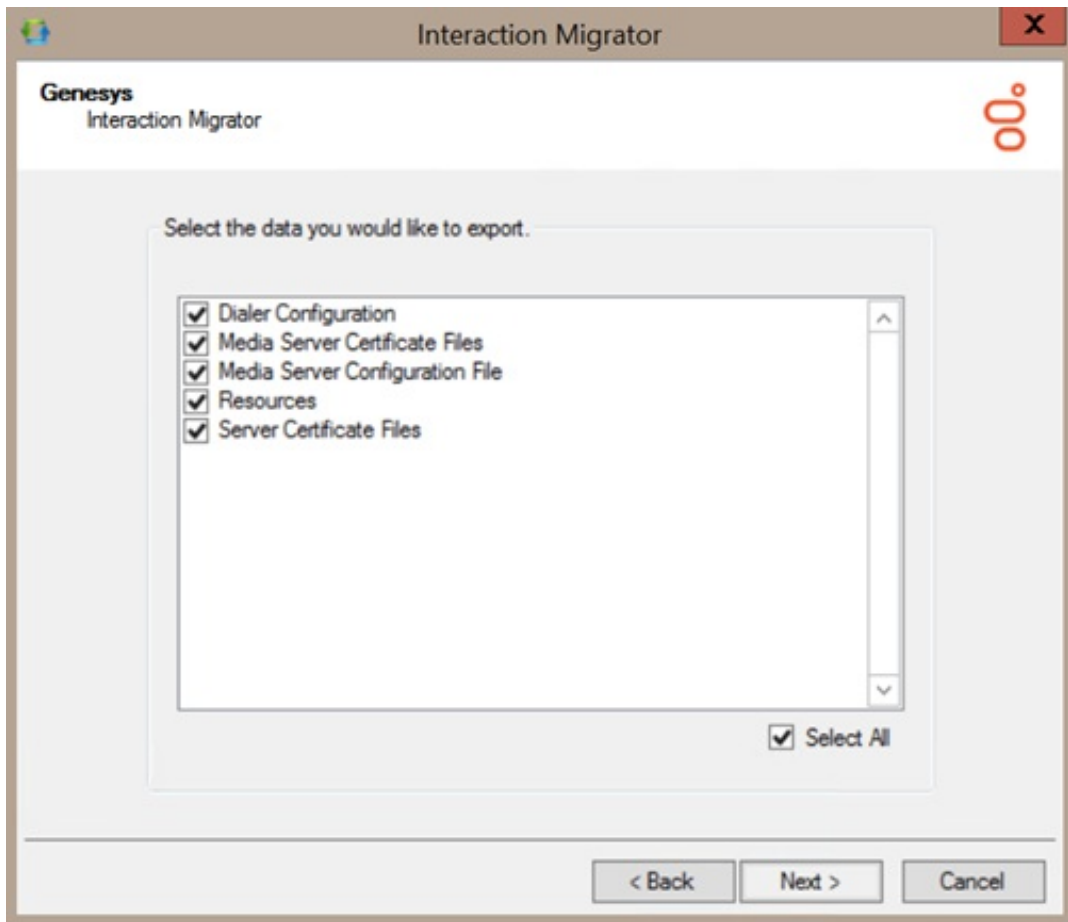
5. On the **Configuration** page, complete the information and then click **Next**.

Where would you like to save the exported configuration data?: Open the folder where you want to save the exported data, for example, `D:\Temp\ExportData`.

> **Important!**
> Do NOT select the root directory of the drive where Interaction Media Server is installed (for example, do not save to the root of `\I3\CIC`) and ensure the export filename contains the name of your Interaction Media Server.

Set password for export file: The password setting is optional. The default selection does not set the password; however, you can set a password since the export file could contain sensitive data. If so, select the check box to specify the password. There are no limitations for setting the password.

6. On the **Export Confirmation** page, confirm the selections and then click **Next** to start the export process.
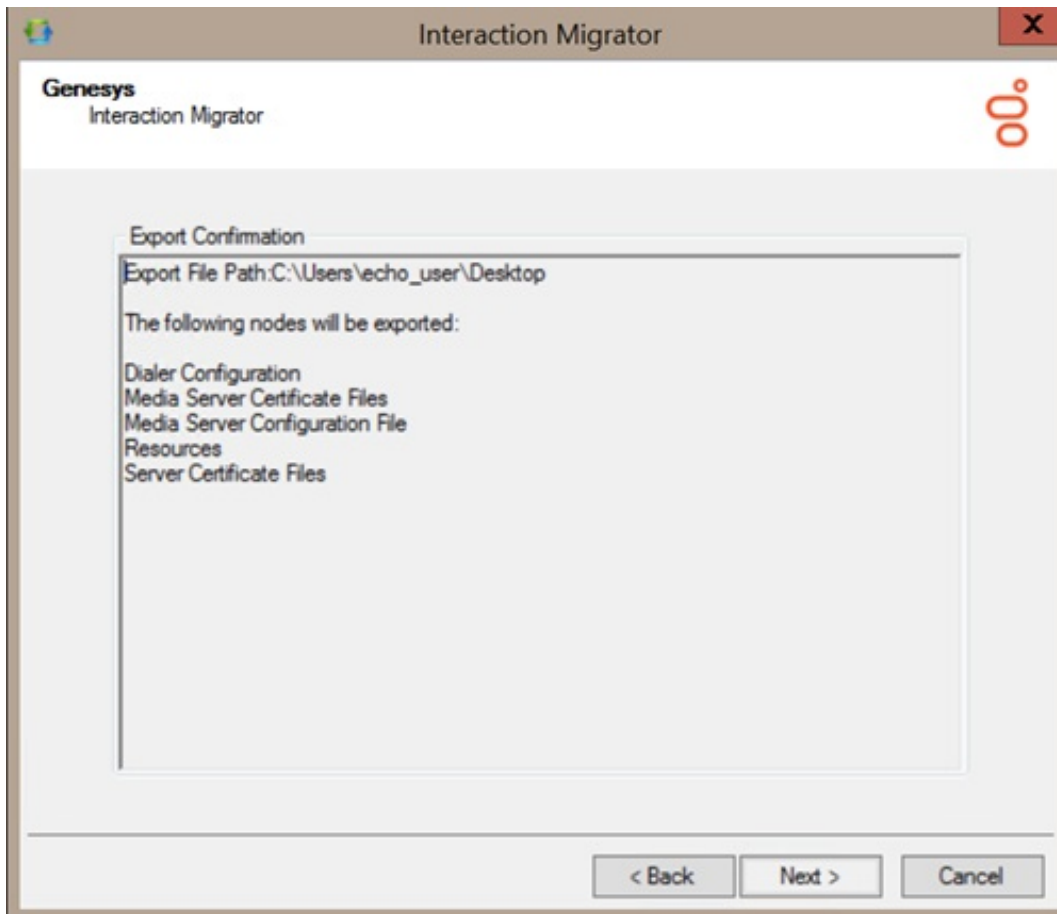
Note: To change your selections, click **Back**.

The **Export Status** page displays real-time updates during the export process. The export process can take several minutes depending on the amount of data being exported.

Note: To stop the process at any time, click **Stop**. After stopping the process, you can go back and change your selection without exiting Interaction Migrator.
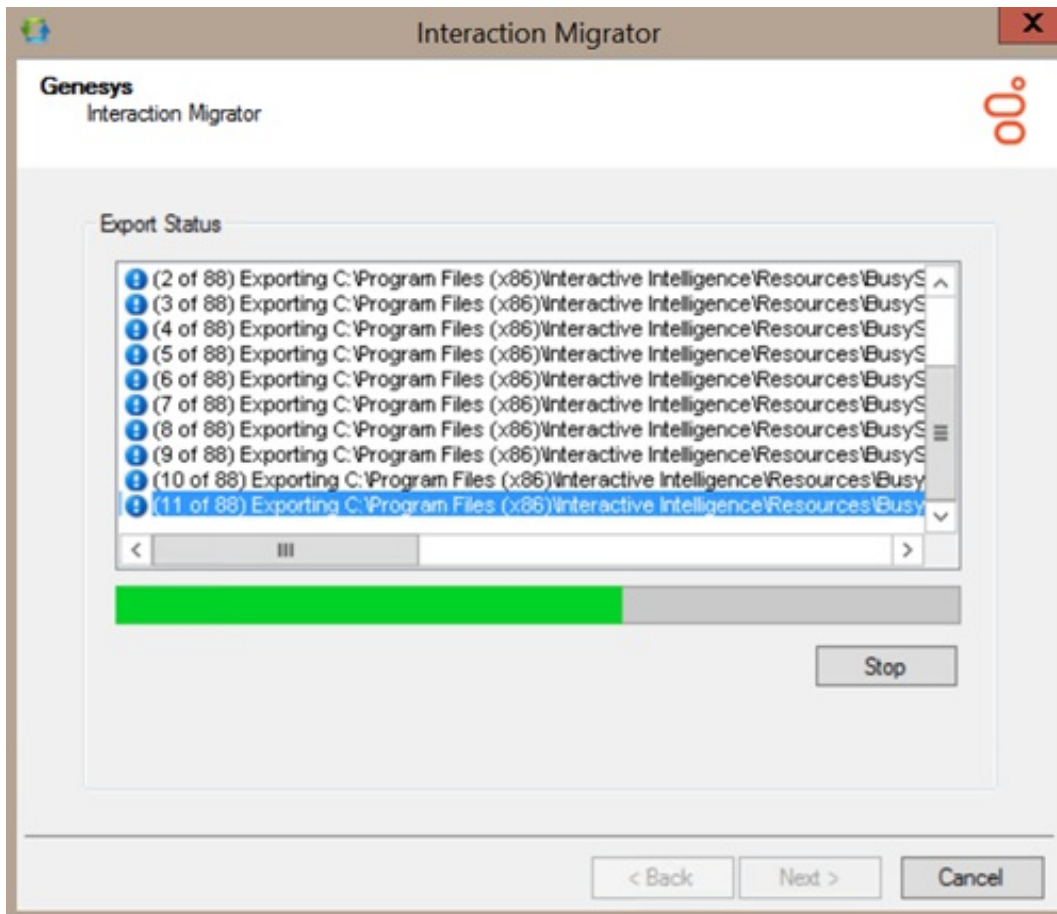
When the export process is complete, the **Export Status** page displays the name and location of the Interaction Media Server configuration data file, and how long the process took.
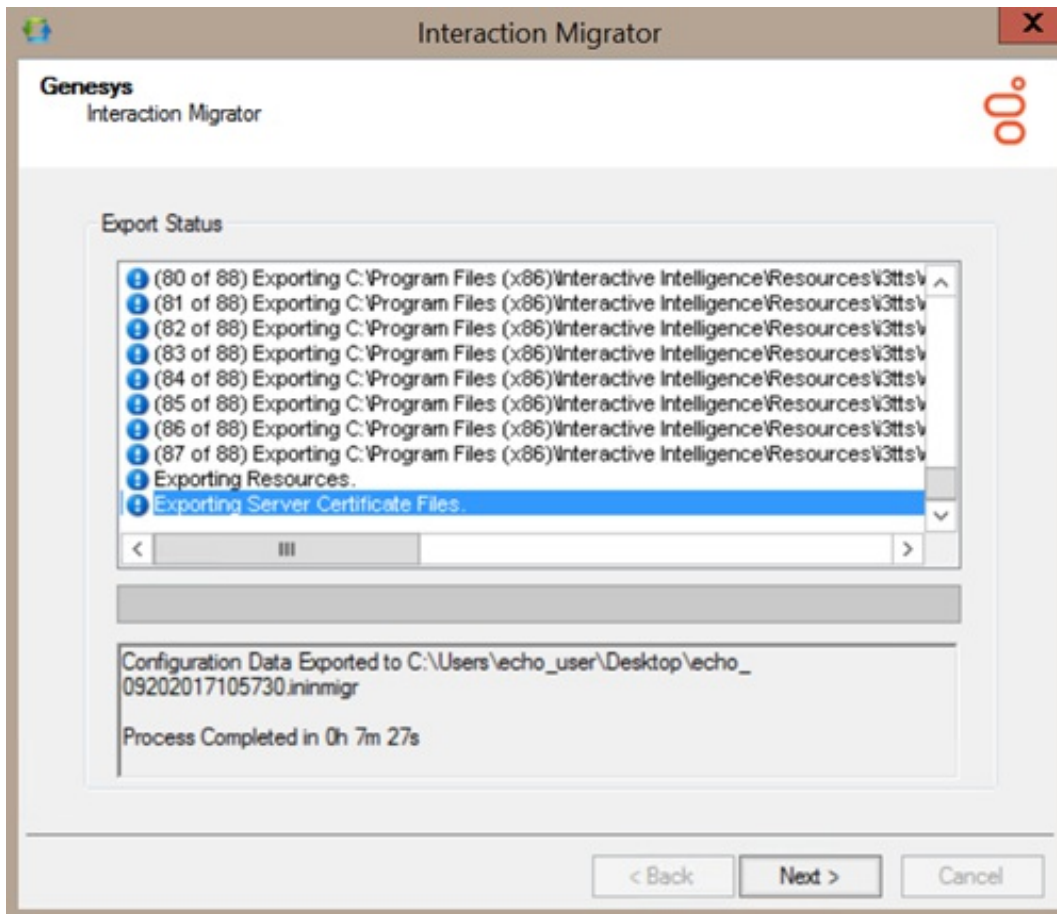
The Interaction Media Server configuration data file name is unique. It consists of the server name combined with a date/time stamp. In this example, the Interaction Media Server configuration data file is `qf_backgammon_07092012143839.ininmigr`.

7. Click **Next** to continue.

> **Note:** To change your selections, click **Back** and return to the **Export Confirmation** page. After you make your changes, start the export process again. A new Interaction Media Server configuration data file is created.

8. Click **Finish** to close Interaction Migrator.
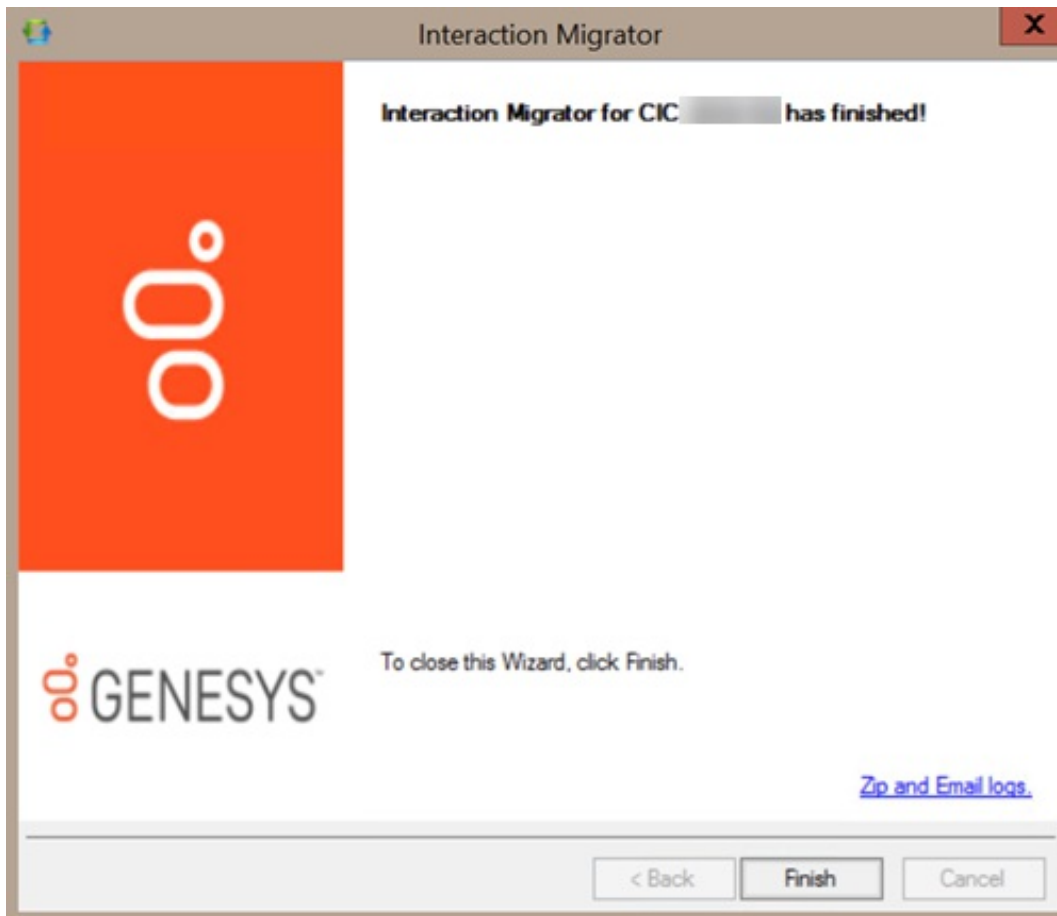
Note: If you encountered issues during the export process, click **Zip and Email logs** to open Outlook and send a copy of the logs to PureConnect Customer Care.

9. Locate the Interaction Media Server 3.0 configuration data file on the Interaction Media Server 3.0 and copy the file to a USB key or other writeable storage location.

Note: Genesys recommends this method of copying the Interaction Media Server configuration data file to so that it's easier to copy the file to the Interaction Media Server 2015 R1 or later.
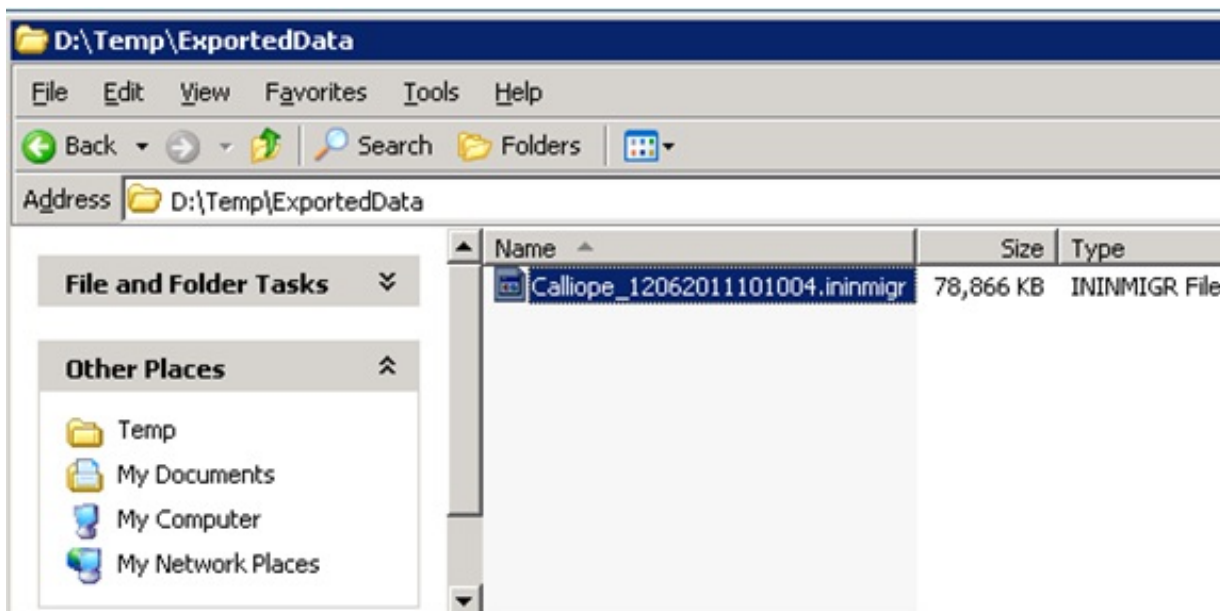
Complete Interaction Media Server pre-migration procedures

Before installing or upgrading to Interaction Media Server 2015 R1 or later, complete the pre-migration procedures in this section.

Copy stored recordings and update the recordings storage path

If you store Interaction Media Server 3.0 recordings locally on the Media Server 3.0, complete this procedure.

To copy stored recordings and update the path:

1. Copy the recordings from Interaction Media Server 3.0 to an external storage location. Confirm that the copied files are not corrupted.
2. If the name of the Interaction Media Server 3.0 doesn't match the name of the Interaction Media Server 2015 R1 or later, update the recordings storage path in Interaction Recorder Policy Editor (in Interaction Administrator), and in the historical records database on the CIC server.

Export SIP Proxy configuration and save it to an external location

If you use Interaction Media Server 3.0 as a SIP Proxy, export the configuration and save it to an external storage location (for example: `C:\Program Files\Interactive Intelligence\Interaction SIP Proxy\Resources\SIPProxyConfig.xml`).

Install or upgrade to Interaction Media Server 2015 R1 or later

The CIC 2.4/3.0 to 4.0 migration process requires a new or upgraded 4.0 Interaction Media Server depending on your existing environment and migration choices.

> **Note:** Determine the computer name to use when the server is running Interaction Media Server 2015 R1 or later. To simplify the migration process, use the same name that the computer had when running Interaction Media Server 3.0. To change the name, ensure that you follow the procedure for generating new certificates in Complete post-migration procedures.

New Interaction Media Server 2015 R1 or later appliance installation

Install the Interaction Media Server 2015 R1 or later software on one of the following:

- An Interaction Media Server 2015 R1 or later appliance purchased from Genesys
- Certified hardware that meets the minimum requirements for Interactive Media Server 2015 R1 or later

For information on how to install a new Interaction Media Server 2015 R1 or later, see "Install Interaction Media Server" in the *Interaction Media Server Technical Reference* in the PureConnect Documentation Library.

Existing Interaction Media Server G6 3.0 appliance upgraded to 2015 R1 or later

After you obtain the appropriate upgrade kit from Genesys, which includes a new USB key and a license for Windows 2008 R2 Telecom, follow the steps in the *Upgrade Kit Instructions*.

The *Upgrade Kit Instructions* include backing up all configurations and recordings before you begin, and then completing the *Factory Image Restoration Procedures* with the new USB key. After you complete these steps, the server runs on Windows 2008 Telecom edition with Interaction Media Server 2015 R1 or later.

> **Warning!**
> It is important to back up all configurations and recordings. As soon as you begin the Factory Image Restoration Procedure, all existing data on the Media Server's hard drives is lost.

Existing Interaction Application (IAS) G7 or CIC Server G7 3.0 appliance used as Interaction Media Server upgraded to 2015 R1 or later

Upgrade the existing (IAS) or CIC Server G7 appliance used as an Interaction Media Server to 2015 R1 or later using the steps in the *Factory Image Restoration Procedures Technical Reference*.

These steps include backing up all configurations before you begin and then completing the *Factory Image Restoration Procedures* with the new USB key, which includes the option to upgrade Interaction Media Server's operating system to Windows Server 2008 R2 using the internal USB key.

> **Warning!**
> It is important to back up all configurations and recordings. As soon as you begin the Factory Image Restoration Procedure, all existing data on the Media Server's hard drives is lost.

Next, install Interaction Media Server 2015 R1 or later on the upgraded Media Server as described in "Install Interaction Media Server" in the *Interaction Media Server Technical Reference* in the PureConnect Documentation Library.

Apply the latest CIC 4.0 Service Update for Interaction Media Server

After you install a new Interaction Media Server 4.0 or upgrade an existing Interaction Media Server appliance to 4.0, apply the CIC 4.0 Service Update for Interaction Media Server that is the same version or higher than the CIC 4.0 server, as described in "Apply Interaction Media Server Service Updates" in the *Interaction Media Server Technical Reference* in the PureConnect Documentation Library.

Install Interaction Migrator on Interaction Media Server 2015 R1 or later

Before you install Interaction Migrator on the Interaction Media Server 2015 R1 or later, ensure that you fulfill the Microsoft .NET Framework requirements for Interaction Media Server. These requirements and installation instructions are described in Interaction Migrator Installation.

To ensure that you install the appropriate version of Interaction Migrator see Install Interaction Migrator and https://my.inin.com/products/cic/Pages/Migrations.aspx.

Import Interaction Media Server 3.0 configuration data

This section describes importing Interaction Media Server 3.0 configuration data to Interaction Media Server 2015 R1 or later using Interaction Migrator.

To import Interaction Media Server 3.0 configuration data:

1. Stop the Interaction Media Server 2015 R1 or later service.
2. Log on to the Interaction Media Server 4. 2015 R1 or later using the same CIC administrator account as when you imported the CIC 3.0 configuration data.
3. Copy the Interaction Media Server 3.0 configuration data file from your storage media (as described in the last step in Export Interaction Media Server 3.0 Configuration Data) to the Interaction Media Server 2015 R1 or later. For example, copy the file to `D:\Temp\ImportData`.

   > **Important!**
   > Do *NOT* copy the file to the root directory of the drive where you installed CIC (for example, do not copy to the root of `\I3\CIC`) as it overwrites critical files).

4. Start Interaction Migrator, either from the Interaction Migrator link on the desktop, or from **Start -> Programs -> Interactive Intelligence -> Interaction Migrator**.
5. On the **Welcome** page, click **Next**.
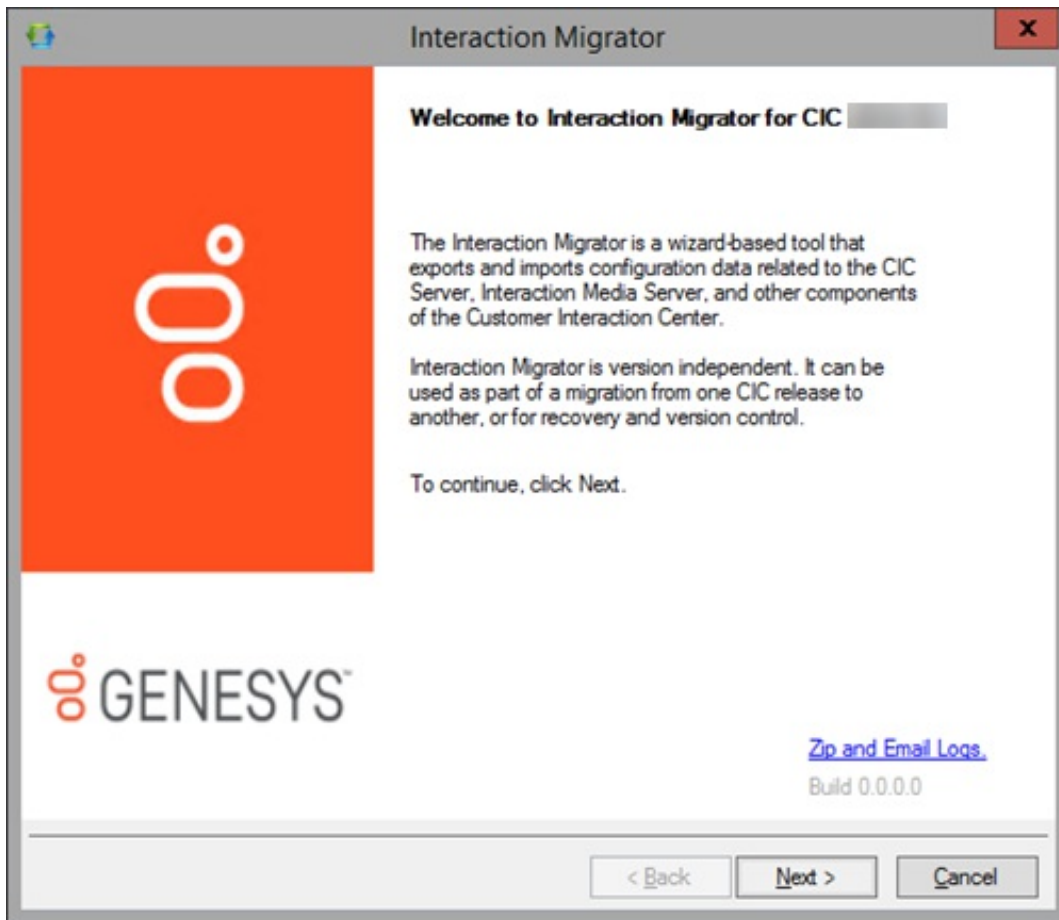
If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.

6. On the **Task Selection** page, select **Import configuration data** and then click **Next**.
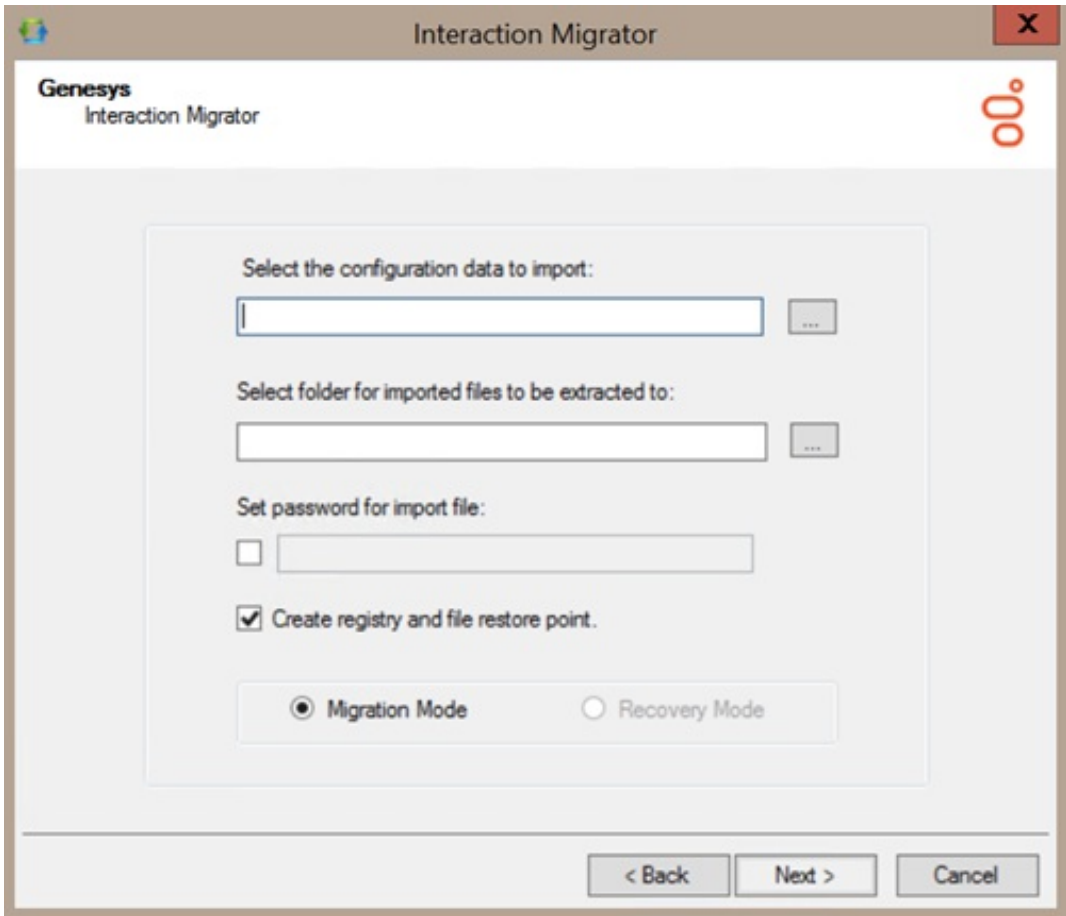
7. On the **Configuration** page, specify the location of the Interaction Media Server 3.0 configuration data `.zip` file and the folder to extract the Interaction Media Server 3.0 configuration data file. Click **Migration Mode**, and then click **Next**.
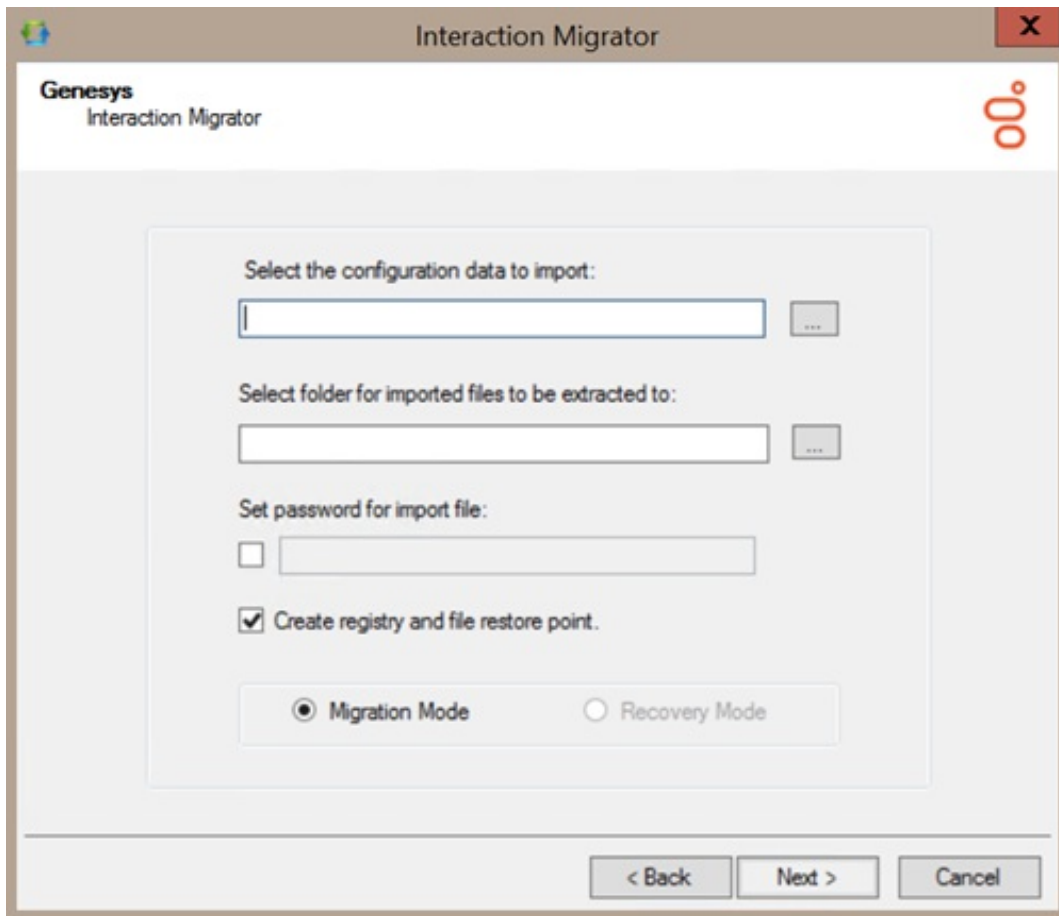
Select the configuration data to import: Location of the exported Interaction Media Server 3.0 configuration data file (for example, `qf_backgammon_07092012143839.ininmigr`) on the USB key or other writeable storage location.

Select folder for imported files to be extracted to: Directory to extract the Interaction Media Server 3.0 configuration data file to. For example, extract the data to `D:\Temp\ImportData`.

> **Important!**
> Do *NOT* copy the file to the root directory of the drive where Interaction Media Server 2015 R1 or later is installed (for example, do not copy to the root of `\I3\CIC`) as critical files are overwritten and ensure the file you import contains the name of your Interaction Media Server and *not* the name of your CIC server.

Set password for export file: If selected, you set a password on the Interaction Media Server 3.0 configuration data file.

[Password]: Password for the Interaction Media Server 3.0 configuration data file. This box is available if you selected the **Set password for export file** check box.

Create registry and file restore point: Interaction Migrator creates a registry restore point for restoring the registry back to the point before running Interaction Migrator to import the Interaction Media Server 3.0 configuration data. When this option is selected, Interaction Migrator runs a registry export of the `Interactive Intelligence` key in hive format. This file is located in the `C:\Program Files (x86)\Interactive Intelligence\Migrator` folder and has a file name extension of `.hive`. Genesys recommends that you keep the default setting.

Migration Mode: If selected, Interaction Migrator runs in migration mode. It is selected by default and you cannot clear it.

> **Notes:**
> - When moving data from one server to another, take into account server name and site name changes. Interaction Migrator changes the data at run time before importing it into the new server.
> - You **cannot** import a configuration data file created using an older version of Interaction Migrator. However, you **can** import a configuration data file created using the same version of Interaction Migrator but an older build number.

8. On the **Select Items to Import** page, ensure **Select All** (default) is selected and then click **Next**.
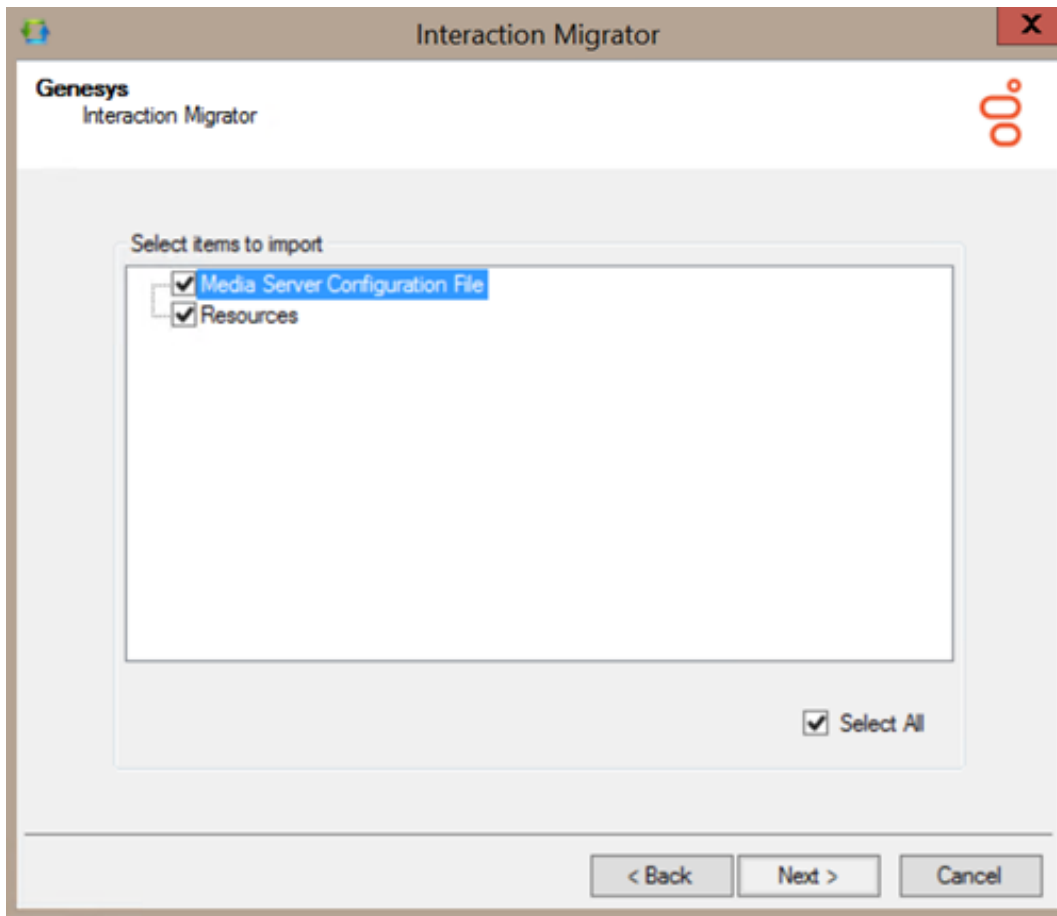
9. On the **Import Confirmation** page, confirm the selections and then click **Next** to start the import process.
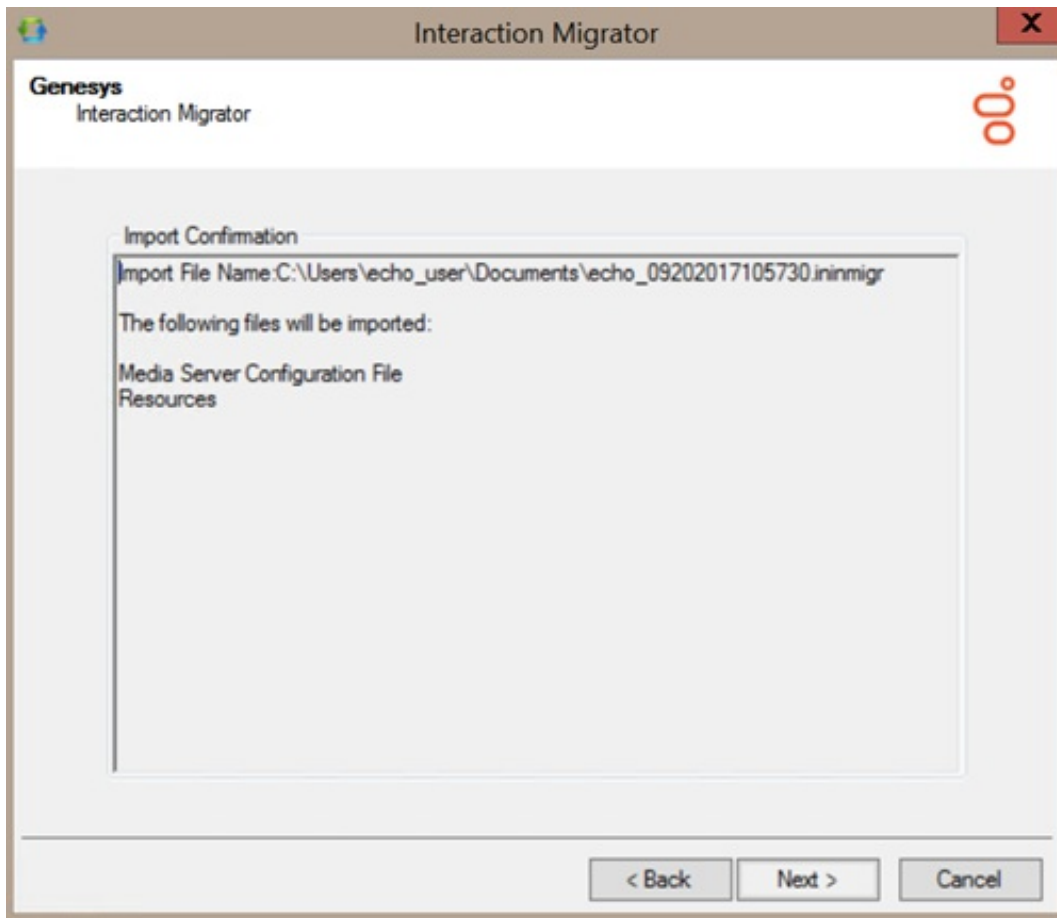
Note: To change your selections, click **Back**.

The **Import Status** page displays real-time updates during the import process.
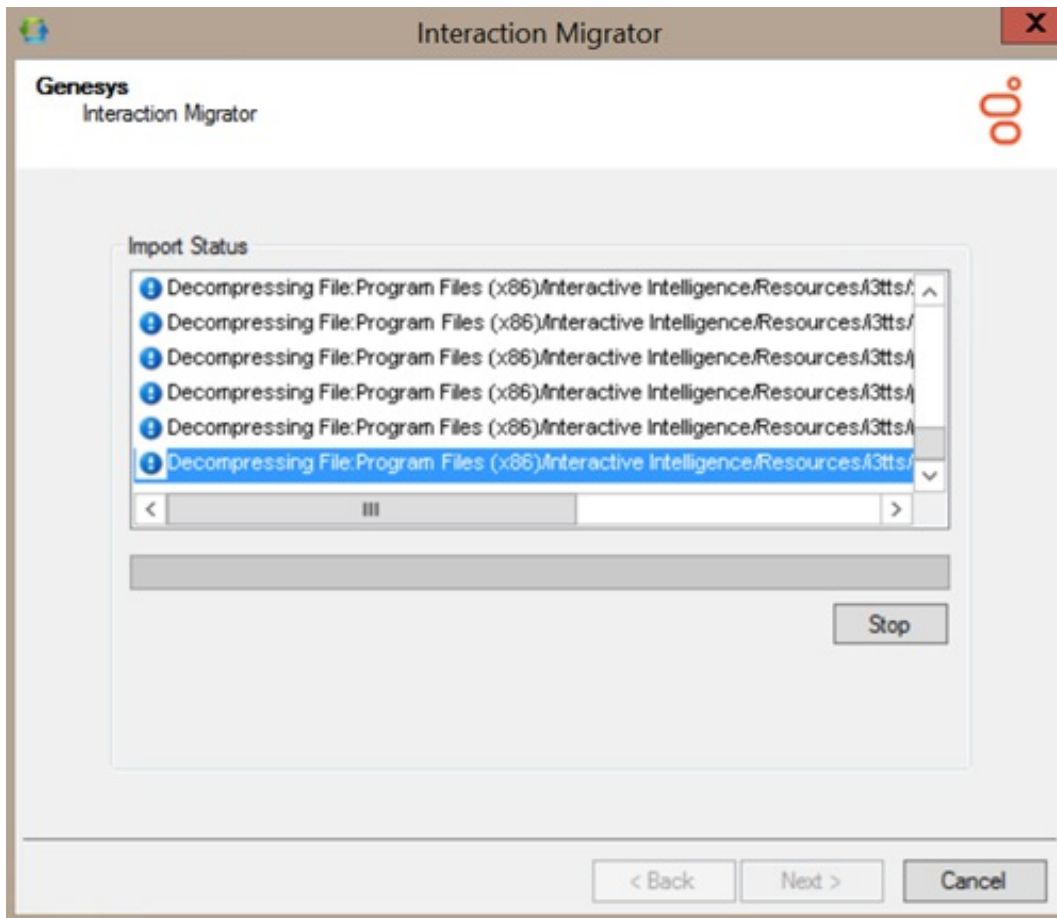
The import process can take several minutes depending on the amount of data being exported.

Note: To stop the process at any time, click **Stop**. After stopping the process, you can go back and change any selections without exiting Interaction Migrator.

When the import process is complete, the **Import Status** page displays when the import completed and how long the process took.
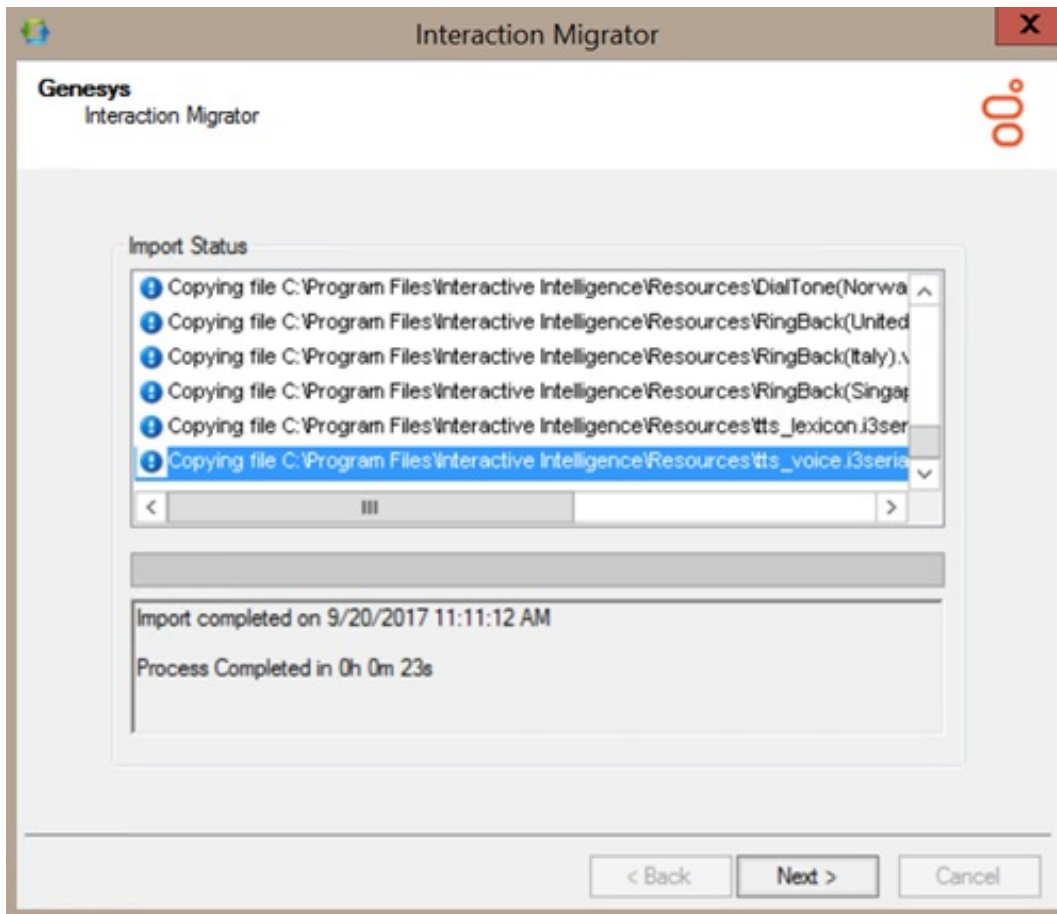
10. Click **Next** to continue.
11. Click **Finish** to close Interaction Migrator.
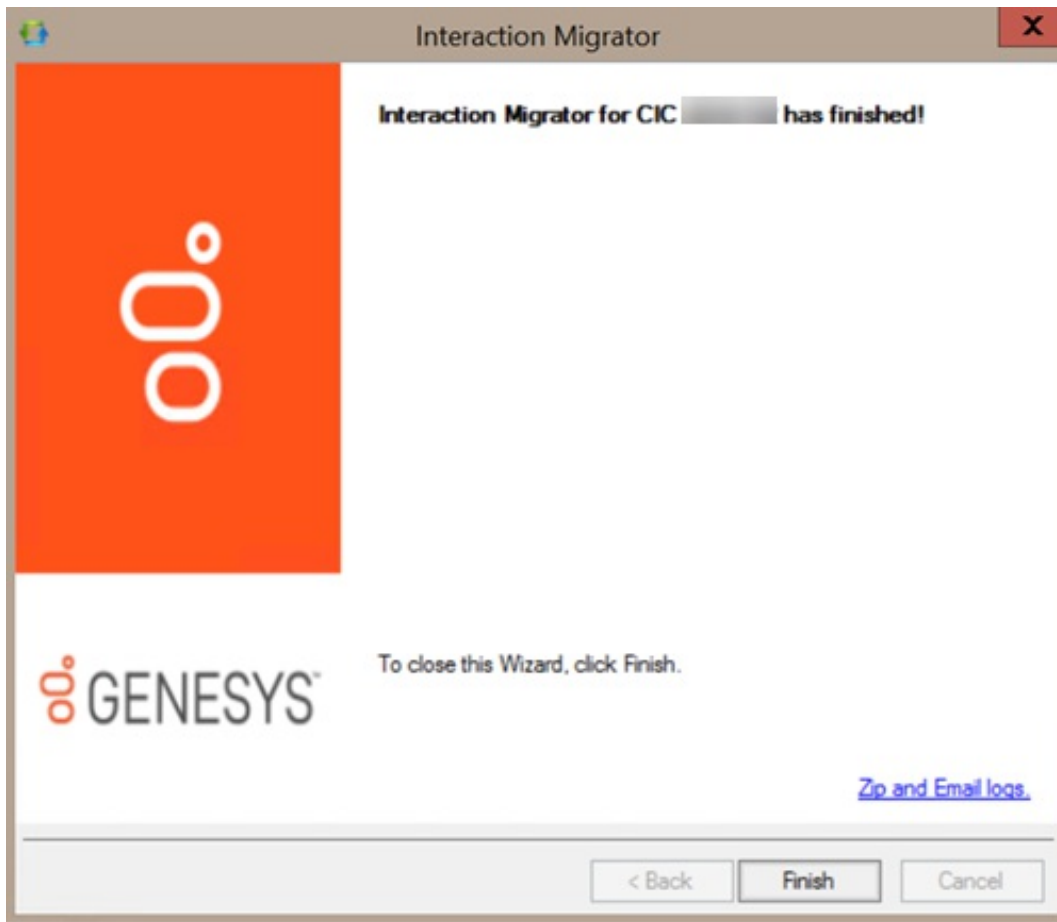
> **Note:** If you encountered problems during the import process, click **Zip and Email logs** to open Outlook and send a copy of the logs to PureConnect Customer Care.

Complete post-migration procedures

After migrating to the Interaction Media Server 2015 R1 or later, complete the post-migration procedures in this section.

Generate new certificates for your CIC servers

New certificates tie to a host name. Generate new certificates for your CIC 2015 R1 or later servers under the following scenarios:

- **Your Interaction Media Server 2015 R1 or later has a different name than your Interaction Media Server 3.0.**

  If you did not choose to use the same computer name as the one when running Interaction Media Server 3.0 as recommended, follow this procedure.

  The existing certificates for the CIC servers joined to the Interaction Media Server 3.0 tie to the Interaction Media Server 3.0 host name. Even though you can move certificates from your Interaction Media Server 3.0 to your Interaction Media Server 2015 R1 or later, these certificates associate to the Interaction Media Server 3.0 host name. Due to the name change, you must recreate the certificates.

  To generate new certificates:
  1. Remove and add back all CIC servers that are present on the Interaction Media Server 4.0.
  2. Go to **CIC Server Sub-System Certificates Configuration**, and mark the certificates as "Trusted."

  For more information, see the *Interaction Media Server Technical Reference* in the PureConnect Documentation Library.

- **Your CIC 4.0 server has a different host name than your CIC 3.0 server.**

  Keeping the CIC server name from CIC 3.0 to CIC 2015 R1 or later requires significant downtime as both devices cannot exist on the same network with the same name. If you decide to change the name of your CIC 2015 R1 or later server, add the CIC 2015 R1 or later server to your Interaction Media Server 2015 R1 or later either before or after importing the CIC configuration data using Interaction Migrator.

Update the recordings storage path in Interaction Recorder Policy Editor

If the name of the Interaction Media Server 3.0 doesn't match the name of the Interaction Media Server 2015 R1 or later, or if the path to the stored Interaction recordings changed, update the recordings storage path in Interaction Recorder Policy Editor (accessed through Interaction Administrator), and in the historical records database on the CIC server.

If you stored recordings locally on Interaction Media Server 3.0, complete this procedure.

To update the recordings storage path in Interaction Recorder Policy Editor:

1. Do the following to update the UNC path for the Recordings directory:
   a. Open **Interaction Administrator**, expand the **Interaction Recorder** node, and click **Policy Editor**.
   b. In the right pane, double-click **Configuration**. **Interaction Recorder Policy Editor** appears.
   c. Click the **Retention** tab, and in the **Policy Description** area, click the path to the media. The **Select Folder** dialog box appears.
   d. Type the path to the Media Server 2015 R1 or later Recordings shared directory.
2. Update the **UNC Path** for **Historical Recording Data** in your CIC database.

Restore the SIP Proxy configuration file to the SIP Proxy Server install directory

If you used Interaction Media Server 3.0 as a Proxy Server, restore the `SIPProxyConfig.xml` file to the SIP Proxy Server install directory.

Set up any other applications from the Interaction Media Server 3.0 post-migration

Set up any other applications from the Interaction Media Server 3.0 environment before the migration (for example, Interaction Recorder Remote Content Server, off-server Session Manager).

Add CIC 2015 R1 or later server to Interaction Media Server

Add the CIC 4. 2015 R1 or later server to the Interaction Media Server 2015 R1 or later as described in "Add CIC server to Interaction Media Server" in the *Interaction Media Server Technical Reference* in the PureConnect Documentation Library.

Migrate Client Workstations

This section describes how to plan for and migrate client workstations.

Workstation Migration Planning

This section describes planning considerations for migrating/upgrading client workstation applications on existing CIC 3.0 workstations to CIC 2015 R1 or later.

Options for upgrading CIC 3.0 client workstation applications

There are three options for migrating/upgrading existing CIC 3.0 client workstation applications to CIC 2015 R1 or later:
- **Interactive Update** (Recommended) - Use Interactive Update to upgrade CIC 3.0 client workstations to CIC 2015 R1 or later. For more information, see Migrate CIC 3.0 Workstations using Interactive Update.
- **Manual (Setup.exe)** Upgrade CIC 3.0 client workstation applications to CIC 2015 R1 or later manually by running `Setup.exe` from the appropriate workstation application share on the CIC server. For more information, see Migrate CIC 3.0 Workstations using Setup.exe.
- **Group Policy** - Use group policy deployment (Windows startup scripts) to upgrade CIC 3.0 client workstations to CIC 2015 R1 or later. For more information, see the *Group Policy Deployment for CIC Applications Technical Reference* in the PureConnect Documentation Library.

> **Note:** For more information about options available for this scenario, see CIC 2.4 to CIC 2015 R1 or later client workstation upgrades.

About CIC 3.0 to CIC 2015 R1 or later client workstation upgrade installations

Review the important items about CIC 2015 R1 or later client workstation migration/upgrade installations in this section.

Migration/upgrade scenario is for same OS only

The migration scenario for client workstations is to migrate/upgrade CIC client workstation applications from CIC 3.0 to CIC 2015 R1 or later on the same workstation.

Previously installed workstation applications are uninstalled

When you run a CIC 2015 R1 or later client workstation install on a CIC 3.0 workstation, it uninstalls the CIC 3.0 versions of the workstation application components installed on the workstation. After the uninstall, it installs the 2015 R1 or later version of the application components.

Previously installed localized workstation applications

For CIC 3.0 implementations that include localized client workstation applications, note that:
- If you ran the CIC 3.0 User Applications install with **UAC disabled**, the CIC 2015 R1 or later User Applications install removes the 3.0 language-related files and registry keys.
- If you ran the CIC 3.0 User Applications install with **UAC enabled**, the CIC 2015 R1 or later User Applications install does *not* remove the 3.0 language-related files and registry keys.

CIC 2015 R1 or later client workstation hardware requirements

For minimum and recommended hardware requirements for running IC User Applications, IC Business Manager Applications, and IC Server Manager Applications on client workstations, see "Client Workstation" in the *PureConnect Installation and Configuration Guide* in the PureConnect Documentation Library.

CIC 2015 R1 or later client workstation software requirements

Before upgrading CIC 3.0 client workstations to CIC 2015 R1 or later, ensure that you fulfilled the software requirements for running IC User Applications, IC Business Manager Applications, and IC Server Manager Applications on client workstations. For information about the requirements, see "Client Workstation" in the *PureConnect Installation and Configuration Guide*.

This section provides a summary of the CIC 2015 R1 or later client workstation software requirements. For more information and instructions, see "Client Workstation" in the *PureConnect Installation and Configuration Guide* in the PureConnect Documentation Library.

Windows OS requirements

- Microsoft Windows 10 version 1511 (32-bit and 64-bit)
- Microsoft Windows 8.1 (32-bit and 64-bit)
- Microsoft Windows 8 (32-bit and 64-bit)
- Microsoft Windows 7 SP1 (32-bit and 64-bit)

> **Notes:**
> - CIC 2015 R1 or later does not support Windows XP.
> - See Changes to IC User Applications in CIC 4.0 to learn about the components included in IC User Applications 4.0.

Other requirements

- PureConnect 2018 R4 or later requires Microsoft .NET Framework 4.7 or later and Microsoft .NET Framework 3.5.1
- CIC 2015 R1 through 2018 R3 require Microsoft .NET Framework 4.5.2 or later and Microsoft .NET Framework 3.5.1

> **Note:** Some Windows operating systems don't support Microsoft .NET Framework 4.7. If your PureConnect version requires Microsoft .NET Framework 4.7 or later, ensure that you have a supported Windows operating system installed. For more information, see https://docs.microsoft.com/en-us/dotnet/framework/get-started/system-requirements.

Changes to IC User Applications in CIC 2015 R1 or later

Note the following changes to IC User Applications from CIC 3.0 to CIC 2015 R1 or later:
- CIC 4.0 contains two versions of IC User Applications installs: 32-bit and 64-bit. Ensure that you use the install version (32-bit or 64-bit) appropriate for the workstation.
- Interaction Screen Recorder Capture Client is a separate install in CIC 3.0. In CIC 2015 R1 or later. The IC User Applications (32-bit and 64-bit) install includes it.
- Interaction Fax 64-bit Print Driver is a separate install in CIC 3.0 SU 11 and later. In CIC 2015 R1 or later, the IC User Applications (64-bit) install includes it.

Custom client settings

> **Note:** Starting with CIC 2015 R3, Interaction Desktop replaces Interaction Client .NET Edition as the primary CIC client. Before you continue, see "Interaction Client .NET Edition 3.0 migration" in the *Transition to Interaction Desktop Administrator's Guide* in the PureConnect Documentation Library.

Interaction Desktop persists users' customized configuration in two locations: the CIC server and the local workstation. This section describes the handling of custom settings stored on the CIC server and locally on client workstations during the migration.

Custom client settings stored on the CIC server

All custom client settings on the CIC server migrate during the CIC server migration to CIC 2015 R1 or later using Interaction Migrator. When migrating from a 3.0 to a 4.0 server, Interaction Migrator moves the client settings files to the 3.0 location. In 4.0 SU 4, Interaction Migrator renames the client setting files to `Interaction Client.zip` and moves the file to the following location:

`CIC\ClientSettings\`*`<user_name>`*`\PersonalStorage\ApplicationSettings\`

For more information, see [Export CIC 2.4/3.0 Configuration Data](#).

Custom client settings stored on the workstation

The migration preserves the following locally-stored custom client settings during the migration. For other locally-stored custom settings, reconfigure them in Interaction Desktop.

Client settings persisted to the local computer:

- Main Form
  - Form Location & Size
- Response Management Form
  - Form Position & Size
  - Splitter Distance
  - Expanded Nodes
  - Pinned Nodes
- Work Items
  - Button Panel Width
  - Splitter Is Collapsed
- New View Form
  - Form Position and Size
  - New View Selected Index (last selected category)
- My Interactions Queue Control
  - (Monitored Queues) Button Panel Width
- Set Status Form
  - Form Position and Size
- Interaction Properties Form
  - Form Location and Size
- Chat Form
  - Form Location and Size
- Email Form
  - Form Location and Size
- Camp Toast
  - Always Pop
  - Auto Hide
- Directories
  - Migrated
  - Toolbar Button Order
  - Toolbar Show Text
- Voicemail Player
  - Playback Device
  - Remote Number
- Other/Miscellaneous
  - Advanced Dial Options Account Code (last used)
  - Advanced Dial Options Workgroup (last used)
  - Configuration Dialog Box Last Open Page Module
  - Configuration Dialog Box Last Open Page Name
  - Lock Client Pages (From Client's Menu: **Options**->**Lock the Views**)
    Pages Dock Area (This area is the XML containing layout for the different docks/views)
  - Plugin.[Name_Of_Plugin] (one for each plugin user has enabled via Configuration Dialog Box)
  - Run Once (automatically add Company Directory on first run)
  - Run Once History (automatically add Call History view on first run)
  - Show Exit Warning Once (taskbar balloon tooltip which appears on first "close")

Localized client workstation application upgrades

CIC 4.0 SU1 introduced the following new functionality for localized client workstation application installations:
- CIC 3.0 and earlier includes languages for CIC client workstation applications in the CIC client workstation application installs as features.
- CIC 2015 R1 or later, released Language Pack resource files for CIC client workstation applications as **Client Language Plugin** installs to simplify deployment. For more information about Client Language Plugins, see "CIC Language Pack Client Workstation Installation" in the *CIC Language Pack Technical Reference* in the PureConnect Documentation Library.

Interactive Update applies updates to Client Language Plugins in the same way it applies updates to CIC client workstation applications. For instructions on migrating/upgrading localized CIC 3.0 client workstation applications to CIC 2015 R1 or later using Interactive Update, see "Migrate CIC 3.0 Workstations using Interactive Update".

`Setup.exe` installs/updates Client Language Plugins along with the CIC client workstation applications. For instructions on migrating/upgrading localized CIC 3.0 client workstation applications to CIC 2015 R1 or later using `Setup.exe`, see Migrate CIC 3.0 Workstations using Setup.exe.

> **Note:** For information about the languages supported in CIC 2015 R1 or later, the Service Update releases in which they are available, and the scope of localization for each language, see the CIC Localization page at https://my.inin.com/products/cic/Pages/Localization.aspx.

CIC 2.4 to CIC 4.0 client workstation application upgrades

Migrating/upgrading client workstation applications on *existing* CIC 2.4 workstations to CIC 2015 R1 or later is not recommended in most cases, since most CIC 2.4 workstations will not likely meet the CIC 2015 R1 or later client workstation Windows OS and .NET Framework requirements.

If you choose to migrate/upgrade existing CIC 2.4 workstations to CIC 2015 R1 or later, the options are:
- **Manual (`Setup.exe`)** Manually upgrade client workstation applications to CIC 2015 R1 or later by running `Setup.exe` from the appropriate workstation application share on the CIC server. See Migrate CIC 3.0 Workstations using Setup.exe.
- **Group Policy** - Use group policy deployment (Windows startup scripts). See *Group Policy Deployment for CIC Applications Technical Reference* in PureConnect Documentation Library.

> **Note:** CIC 3.0 introduced the IC User Applications, IC Business Manager Applications, and IC Server Manager Application modules. It also introduced Interactive Update.

Interaction Dialer 2.4/3.0 to CIC 2015 R1 or later client workstation application upgrades

Interaction Dialer 2.4/3.0 to CIC 2015 R1 or later client workstation application upgrades work the same way as CIC 2.4/3.0 to CIC 2015 R1 or later client workstation application upgrades.

> **Notes:**
> - You can upgrade Interaction Scripter .NET using Interactive Update, `Setup.exe`, or group policy the same way as the CIC client workstation applications.
> - If you installed Interaction Scripter Win32, the Interaction Scripter .NET install removes it.

Migrate CIC 3.0 Workstations Using Interactive Update

This section describes how to use Interactive Update to migrate/upgrade CIC 3.0 client workstations to CIC 2015 R1.

About Interactive Update

Interactive Update is the recommended method for applying PureConnect product releases and patches. For CIC 3.0 to CIC 2015 R1 or later migrations, Interactive Update applies major version upgrades.

Interactive Update is similar to the Microsoft Update process. It allows CIC administrators to manage updates to PureConnect products, and to download and apply the updates to the CIC server, client workstations, and other devices on the CIC system network.

> **Note:** This section assumes that you are familiar with managing and applying PureConnect product updates using Interactive Update. For general instructions and procedures, see the *Interactive Update Technical Reference* in the PureConnect Documentation Library.

Required CIC and Interactive Update versions

It is crucial that you install the correct CIC and Interactive Update versions on the CIC 3.0 server, CIC 3.0 client workstations, and the CIC 2015 R1 or later server before you attempt to upgrade the CIC 3.0 client workstations to 2015 R1 or later using Interactive Update. The required CIC and Interactive Update Service Update (SU) versions contain the functionality necessary for the migration/upgrade.

CIC 3.0 server

The CIC 3.0 server requires the following:
- CIC 3.0 SU 14 or later
- (If applicable) CIC 3.0 SU 14 or later Language Packs
- Interactive Update Provider and Interactive Update Client 1.0 SU 12 with IUPDATE-1848 ES and IUPDATE-1890 ES

CIC 3.0 client workstation

CIC 3.0 workstations require the following:
- CIC 3.0 SU 14 or later CIC Workstation Applications
- (If applicable) CIC 3.0 SU 14 or later localized workstation applications
- Interactive Update Client 1.0 SU 12 with IUPDATE-1848 ES

CIC 2015 R1 or later server

The CIC 2015 R1 or later server requires the following:
- CIC 2015 R1 or later
- (If applicable) 2015 R1 or later Language Packs
- Interactive Update Provider and Interactive Update Client 2015 R1 or later
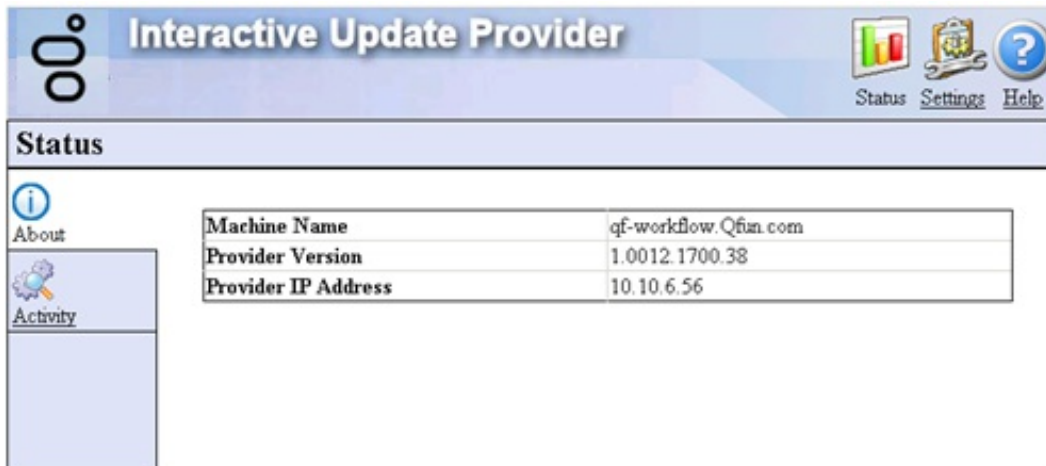
Interactive Update Provider settings

This section describes the Interactive Update Provider settings on the CIC 3.0 and CIC 2015 R1 or later servers.

Interactive Update Provider 1.0 on CIC 3.0 server

On the **About** page, verify that the Interactive Update Provider 1.0 on the CIC 3.0 server has the correct local provider and PureConnect provider settings.

The **About** page lists the CIC 3.0 server as the local provider. In the following example, the CIC 3.0 provider is qf-workflow.

Interactive Update Provider 2015 R1 or later on CIC 2015 R1 or later server

On the **About** page, verify that the Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server has the correct local provider and settings.

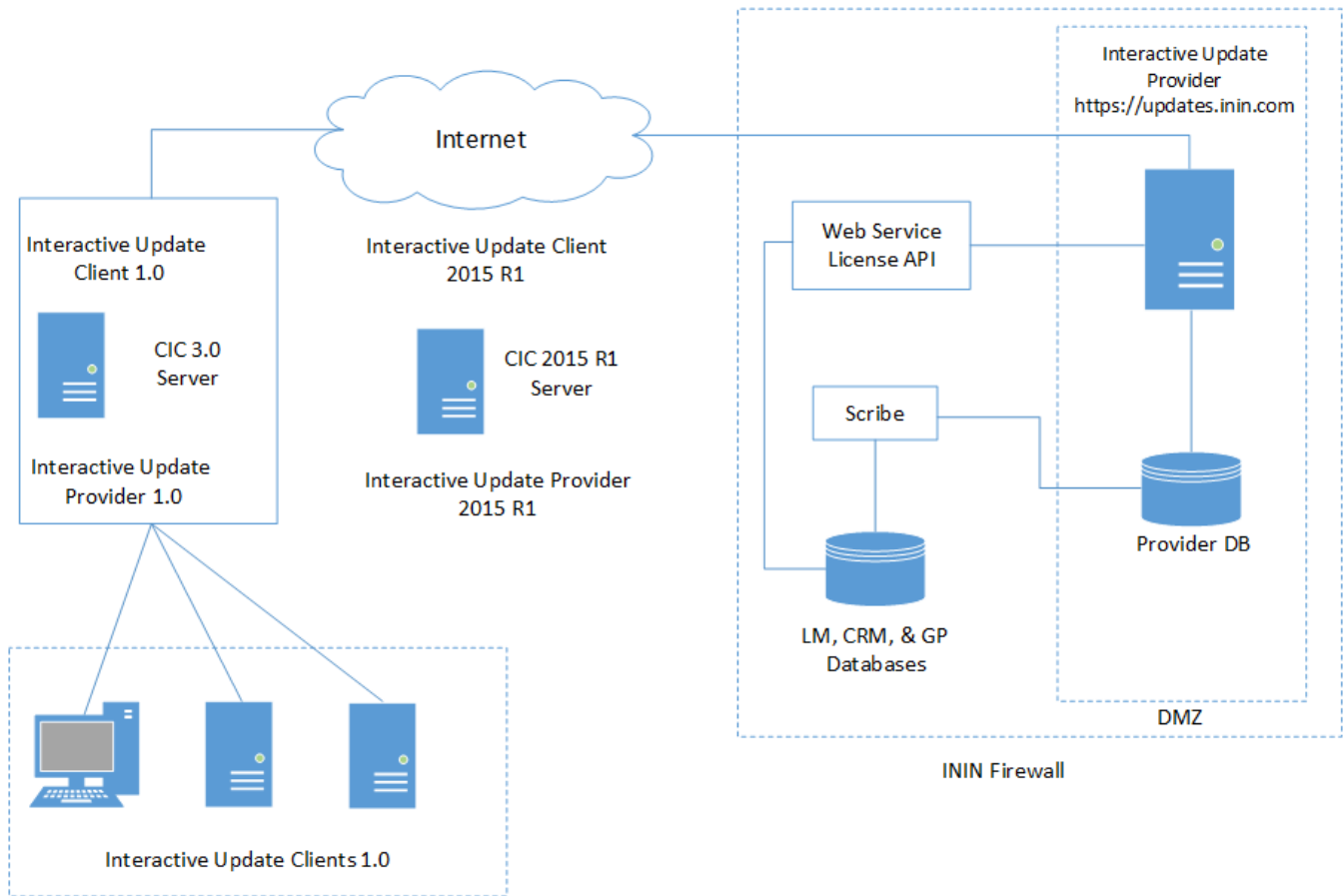## CIC 3.0 to CIC 2015 R1 or later client workstation migration overview

For a general description of the Interactive Update architecture, see the *Interactive Update Technical Reference* in the PureConnect Documentation Library.

Part 1: Client workstation migration tasks on Interactive Update Provider 1.0

This procedure, completed on the Interactive Update Provider 1.0 server (CIC 3.0 server) consists of the following tasks:
- Add the Interactive Update Client 2015 R1 or later install as a new update (major version upgrade), pulled from the `CIC_IUpdate` share on the CIC 2015 R1 or later server.
- Set an MSI parameter to change the local provider from the CIC 3.0 server to the CIC 2015 R1 or later server. This action changes a configuration setting on all workstations receiving the Interactive Update Client 2015 R1 or later install so that the Interactive Update Client service on those workstations starts receiving updates from the Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server.
- Create a computer group for the client workstations to migrate to for testing purposes. (You can create more groups later for a phased or full deployment.)
- Mark the Interactive Update Client 2015 R1 or later install as GA and push it out to the client workstations in the migration computer group.

The following illustration shows Part 1 of the client workstation upgrade on Interactive Update 1.0 Provider on the CIC 3.0 server:
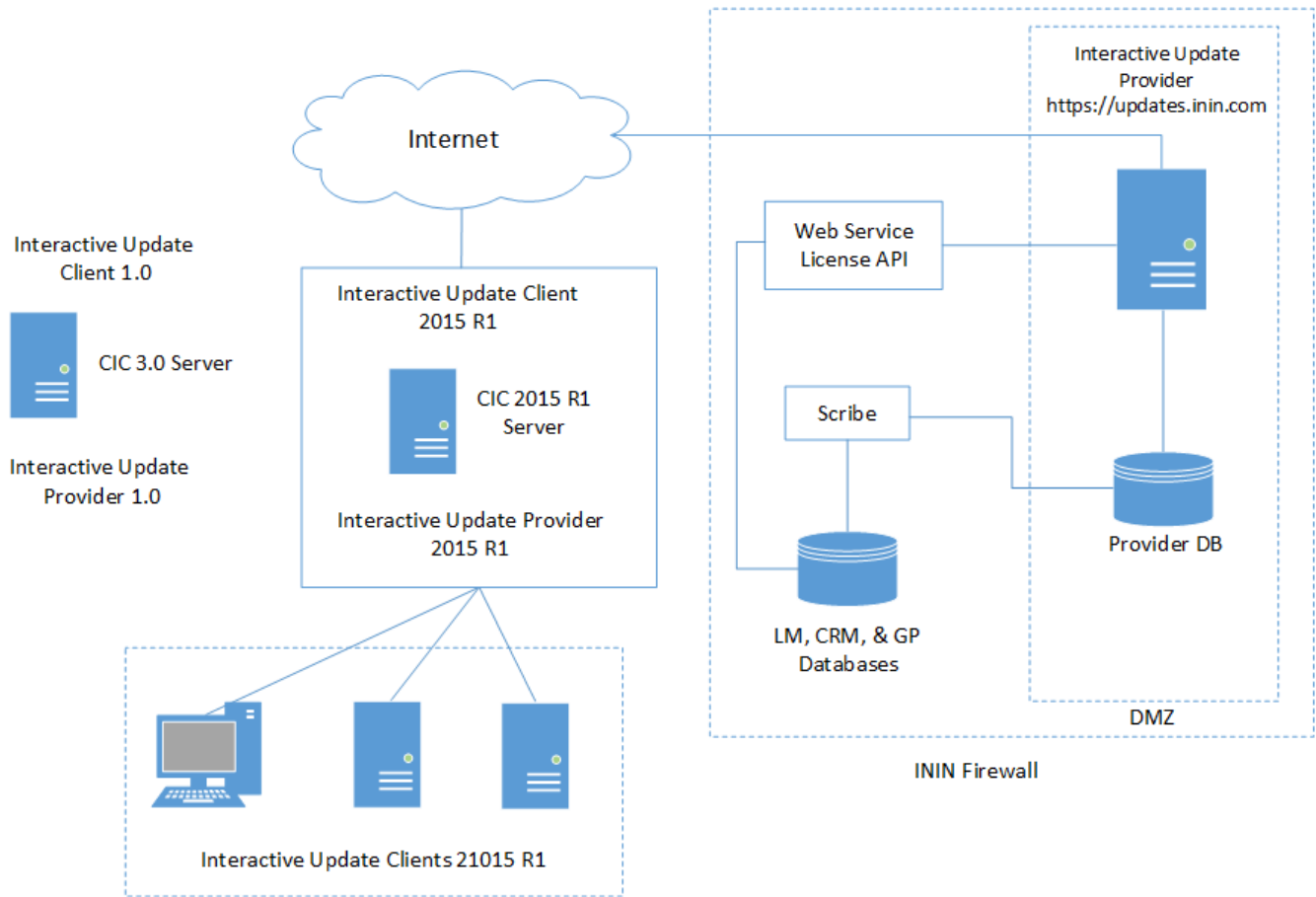
Part 2: Client workstation upgrade tasks on Interactive Update Provider 2015 R1 or later

This procedure, completed on the Interactive Update Provider 2015 R1 or later server (CIC 2015 R1 or later server) consists, of the following tasks:

- If you use the PureConnect provider (updates.inin.com) to get updates on the CIC server, the latest Interactive Update Client 2015 R1 or later update is added to Interactive Update Provider automatically.

  -OR-

  If you download and apply updates to the CIC server manually, add the latest Interactive Update Client 2015 R1 or later install as a new update in Interactive Update Provider, pulled from the `CIC_Update` share on the CIC 2015 R1 or later server.
- Add the CIC 2015 R1 or later client workstation application installs and SUs as new updates, pulled from the appropriate shares on the CIC 2015 R1 or later server.
- If applicable, add the Client Language Plugins for the CIC 2015 R1 or later client workstation applications as new updates, pulled from the appropriate shares on the CIC 2015 R1 or later server.
- Mark the Interactive Update 2015 R1 or later update and CIC 2015 R1 or later client workstation application installs as GA and push out to client workstations.

The following illustration shows Part 2 of the client workstation upgrade on Interactive Update 2015 R1 or later Provider on the CIC 2015 R1 or later server:

For instructions, see .

Part 1: Client workstation upgrade tasks on Interactive Update Provider 1.0

This section describes the client workstation upgrade tasks on Interactive Update Provider 1.0.

CIC 3.0 client workstation applications in example scenario

This example shows the following applications installed already on the CIC 3.0 client workstations:

- CIC 3.0 SU 20 Business Manager Applications
- CIC 3.0 SU 20 Server manager Applications
- CIC 3.0 SU 20 User Applications
- Interactive Update 1.0 SU 12

Interactive Update 2015 R1 GA installs as a major version upgrade.

Add the Interactive Update Client 2015 R1 or later as a new update, allow workstations to receive updates from Provider 2015 R1 or later

This task consists of:

- Adding the Interactive Update Client 2015 R1 or later install as a new update (major version upgrade), pulled from the `CIC_IUpdate` share on the CIC 2015 R1 or later server.
- Setting an MSI parameter that changes the local provider from the CIC 3.0 server to the CIC 2015 R1 or later server. This action changes a configuration setting on all workstations receiving the Interactive Update Client 2015 R1 or later install so that the Interactive Update Client service on those workstations starts receiving updates from the Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server.

To add the Interactive Update Client 2015 R1 or later install as a new update:

1. Open Interactive Update Provider 1.0 on the CIC 3.0 server and click the **Updates** page.
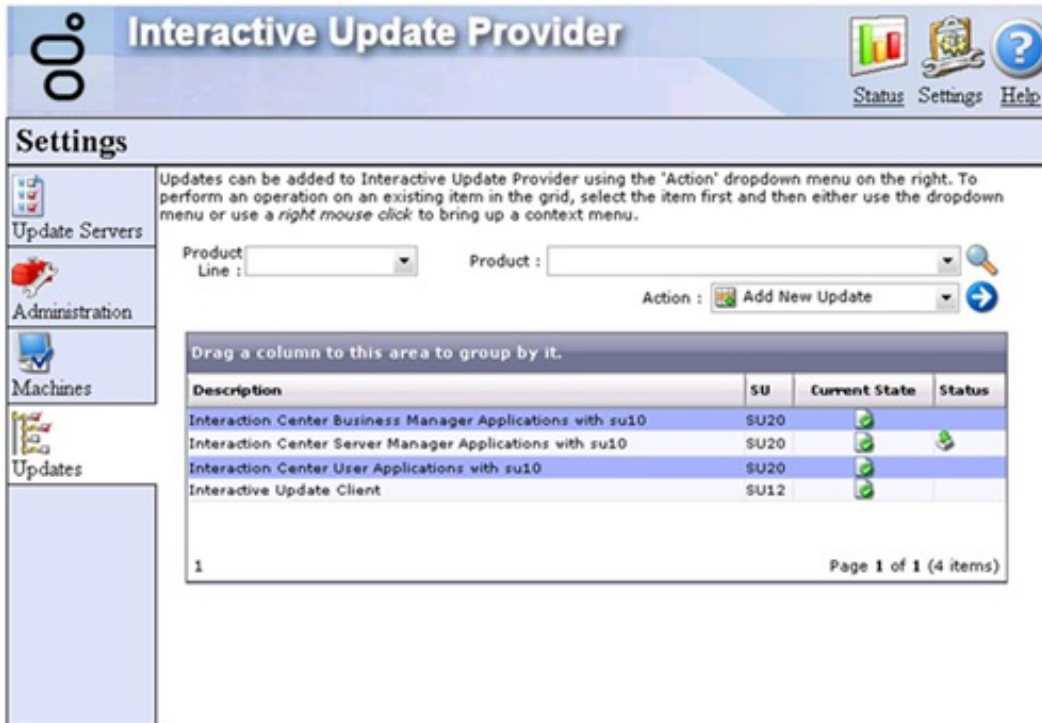
> **Note:** CIC 3.0 includes the German and Spanish versions of IC User Applications within the IC User Applications update.

2. In the **Action** list box, click **Add New Update** and then click the arrow [ ] next to the list box. The **Add New Update** page appears.

3. In the **Add New Update** page, click **Browse**.

4. In the **Choose File to Upload** page, in the **File name** box, type `\\`*servername*`\CIC_Update` and then click **Open** to view the contents of the `CIC_IUpdate` share on the CIC 2015 R1 or later server.

5. In the **CIC_Update share**, click **IUpdateClient.msi** and then click **Open**.
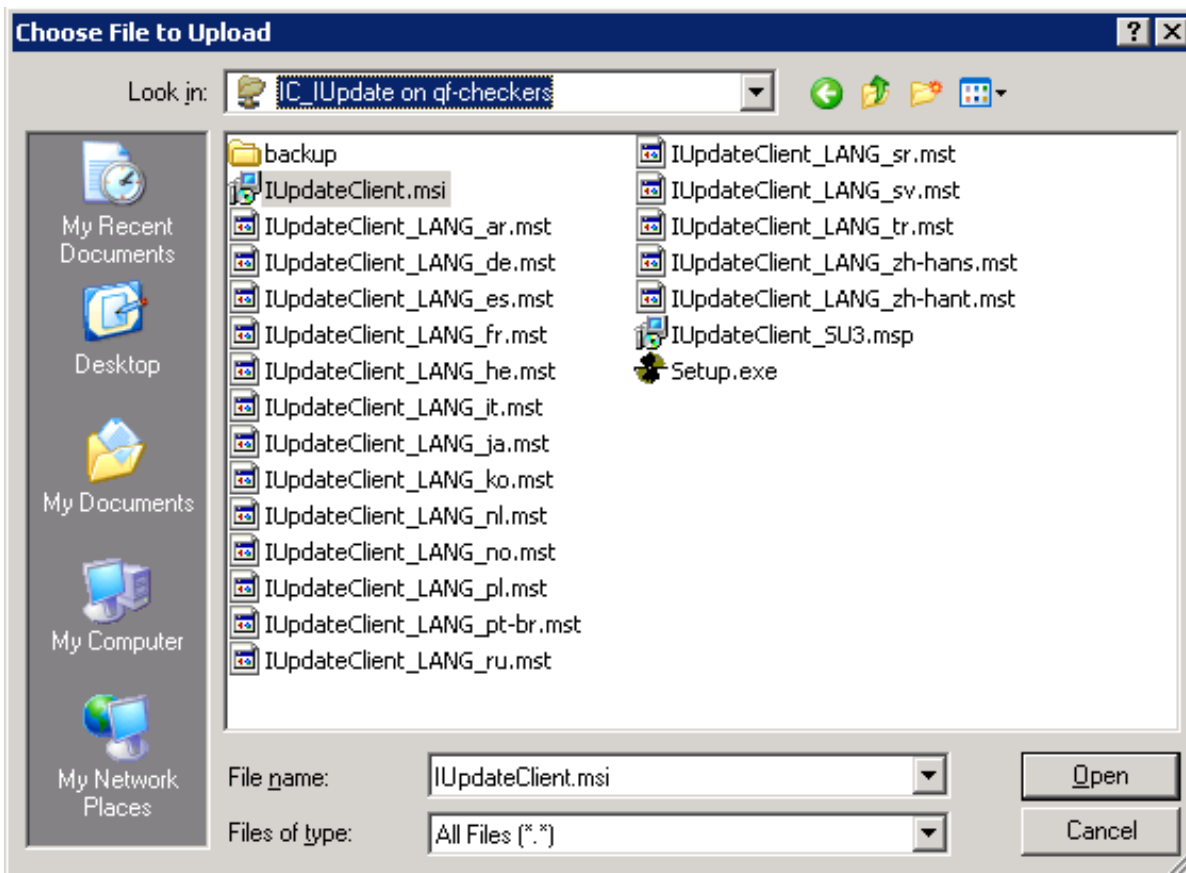
The system adds the `\\`*servername*`\CIC_Update\IUpdateClient.msi` path to the **File** box in the **Add New Update** page.

6. In the **MSI Properties** box, type `providerservername=`*servername* to change the local provider from the CIC 3.0 server to the CIC 2015 R1 or later server. Genesys recommends using a fully qualified domain name (FQDN), not a short name.
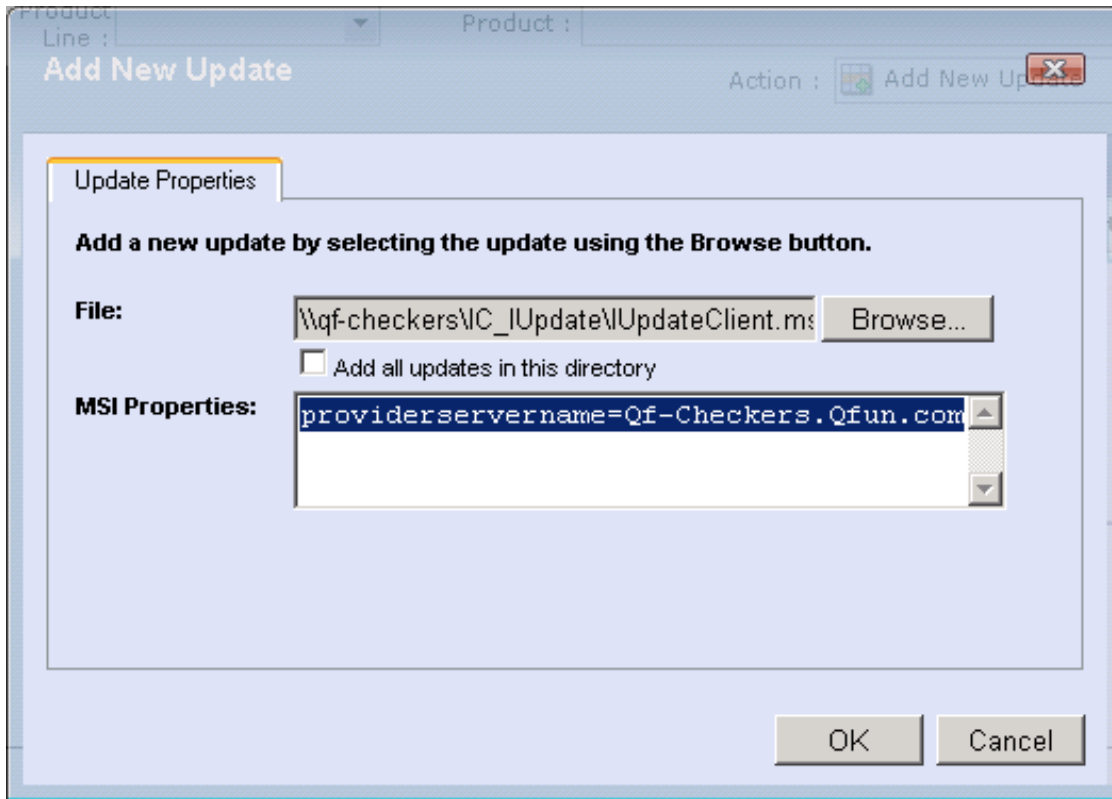
This action changes a configuration setting on all workstations receiving the Interactive Update Client 2015 R1 or later install so that the Interactive Update Client service on those workstations starts receiving updates from the Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server.

7. Click **OK**. An **Update Info** message appears, indicating that the Interactive Update Client 2015 R1 or later install added successfully.

8. Click **OK**. The Interaction Client 2015 R1 or later install appears on the **Updates** data grid, with the **pre- Approval** icon [🔲] in the **Current State** column.

Create a migration computer group

Interactive Update 1.0 SU 10 introduced the ability to designate a computer group to upgrade all workstations in that group from Interactive Update 1.0 to Interactive Update 2015 R1 or later (major version upgrade).

Once the Interactive Update 2015 R1 or later install is marked as GA and pushed out to the *migration* computer group, the workstations in the *migration* computer group start receiving updates from Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server.

This feature allows you to:

- Create an initial *migration* computer group consisting of a small number of workstations to test the migration process.
- Migrate groups of client workstations to CIC 2015 R1 or later in phases, allowing those workstations that have not migrated to continue receiving updates from Interactive Update Provider 1.0 on the CIC 3.0 server.

To create a *migration* computer group:

This example adds one computer to a new *migration* group called **toMigrate**.

1. In Interactive Update Provider 1.0 on the CIC 3.0 server, click the **Machines** page.

2. Right-click on the NON-GROUPED group in the Groups container and click **Add Group**.

3. In the **Add Group** page, do the following:
   - Type a **Group Name** appropriate to designate it as *migration* computer group, for example, **toMigrate**.
   - Specify the **Download Mode**, **Download/Install Time**, and **Install Interval** as appropriate for your implementation.
   - Select the **Allow Interactive Update Migration** check box.
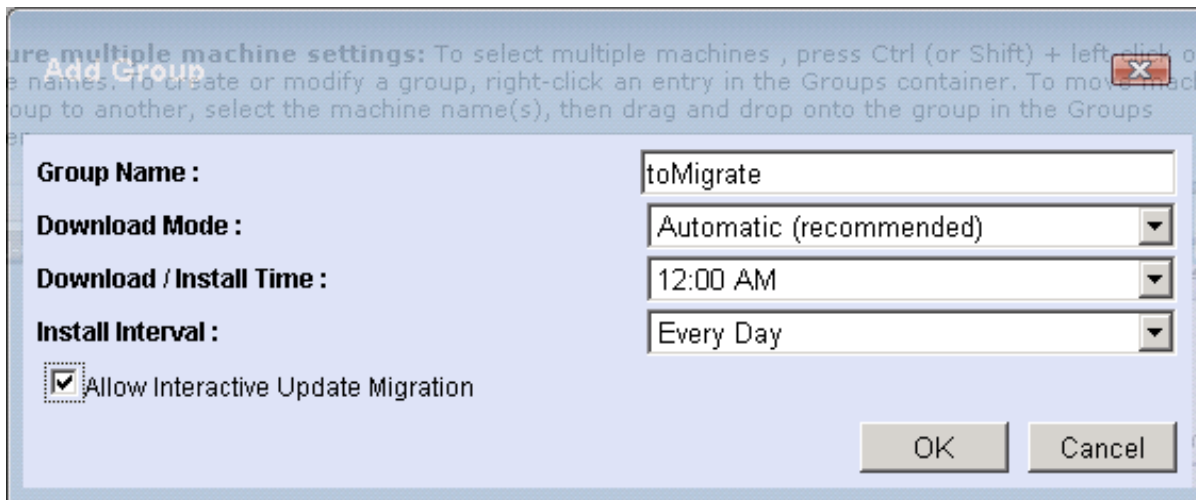
4. Click **OK**. The **toMigrate** computer group appears in the **Groups** container.
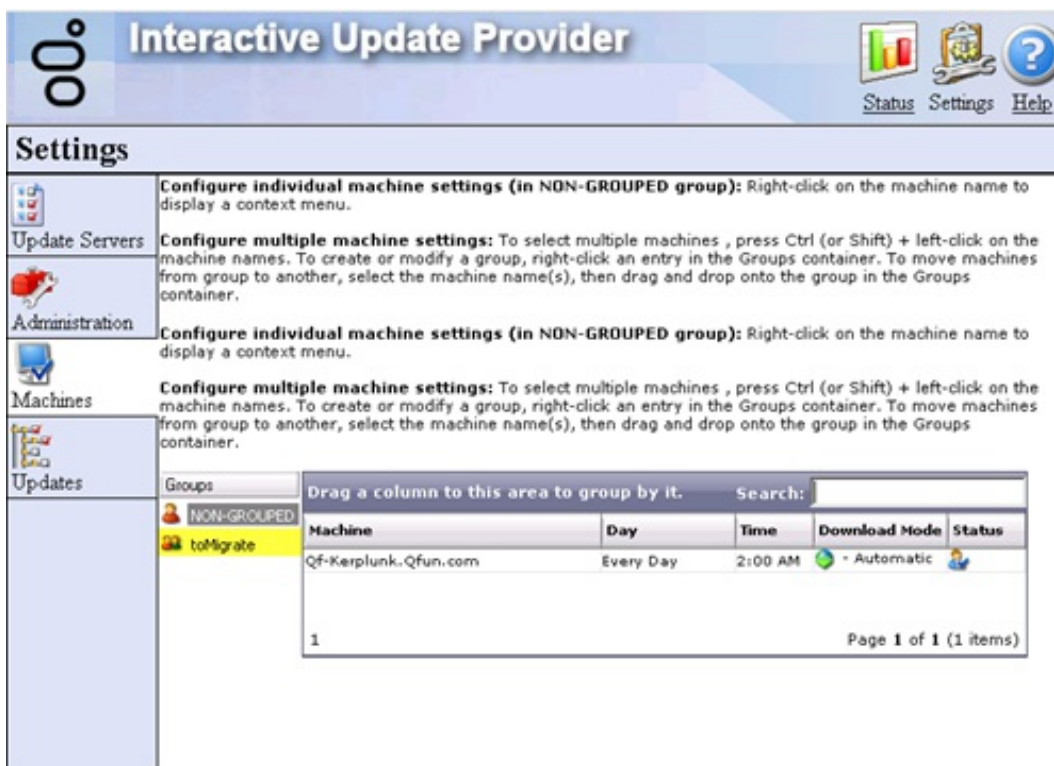
5. Select the computer in the NON-GROUPED group and drag it to the **toMigrate** group.

> **Note:** Starting with Interactive Update 1.0 SU 12, the Modify Group Members option is available. Genesys recommends using this option to populate computer groups as it is simpler and less error-prone than the drag and drop option.

6. In the **Move Machines** page, verify that this computer is the one that you want to move to the **toMigrate** group.

7. Click **OK** when the **Machine Moved** page confirms that the computer moved successfully.
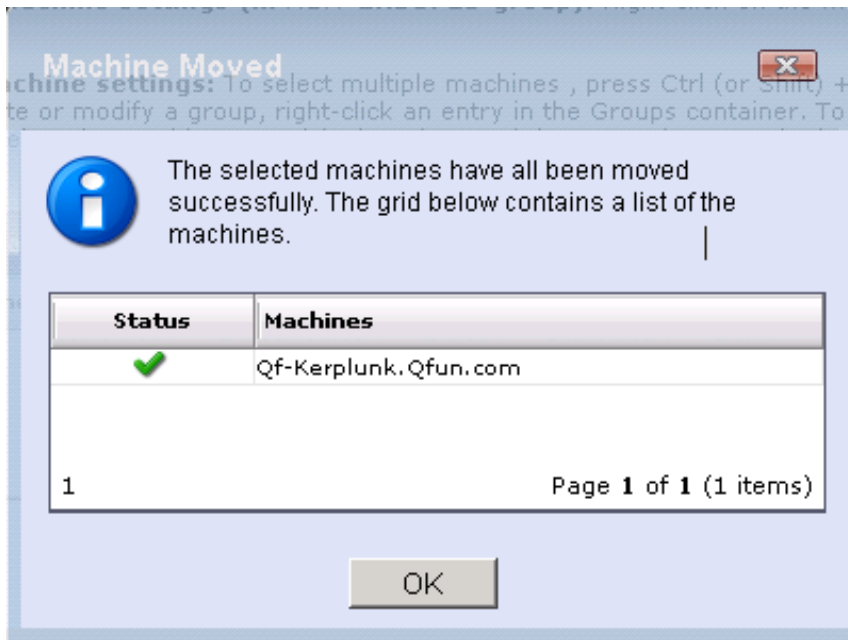
8. Click the **toMigrate** group in the **Groups** container to view the computer in the **toMigrate** group.
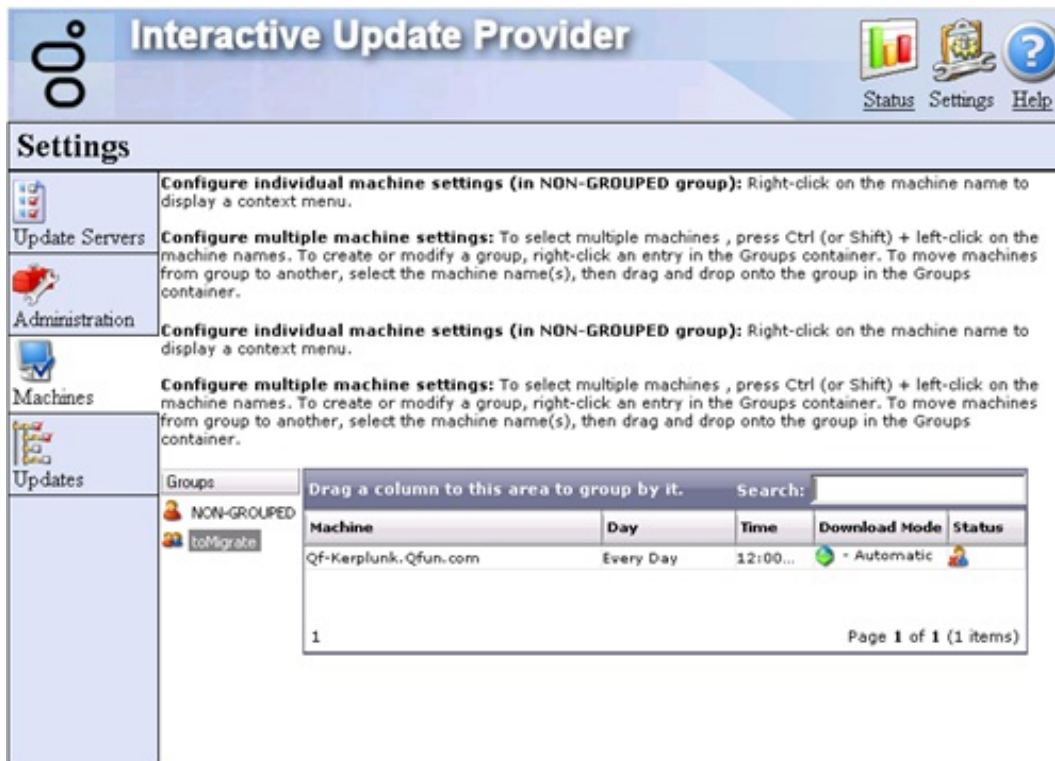
Mark Interactive Update Client 2015 R1 or later as GA and push out to the migration computer group

In the final task on the CIC 3.0 server, mark the Interactive Update Client 2015 R1 or later install as GA and push it out to the workstation in the **toMigrate** group.

To mark Interactive Update Client 2015 R1 or later as GA and push out to the migration computer group:
1. In Interactive Update Provider 1.0 on the CIC 3.0 server, click the **Updates** page.
2. Right-click **Interactive Update Client GA** (2015 R1 or later) and then click **Change Current State -> Mark as 'GA'**.
3. A message similar to the following message appears. Click **OK** to continue.
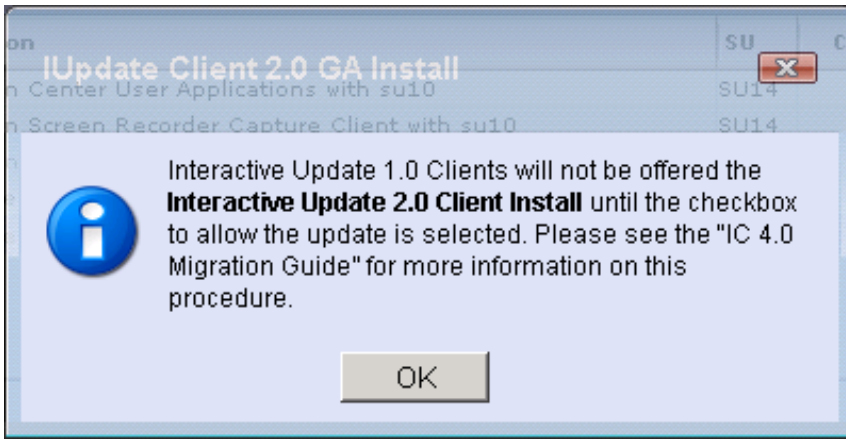
The message may indicate incorrect version numbers. This message indicates that while the Interactive Update Client install is marked as GA, it only pushes out to computer groups configured with the **Allow Interactive Update Migration** check box selected, as described in Create a migration computer group.

> **Notes:**
> - By default, the Interactive Update Client 2015 R1 or later install doesn't push out to computers in the NON-GROUPED group. However, to push out the Interactive Update Client 2015 R1 or later install to all computers in the NON-GROUPED group, return to the **Machines** page, right-click on the NON-GROUPED group, and select the **Allow Interactive Update Migration** check box.
> - Computer groups, including the NON-GROUPED group, that do *not* have the **Allow Interactive Update Migration** check box selected continue to receive updates from Interactive Update Provider 1.0 on the CIC 3.0 server.

4. In the **Updates** page data grid, the **Current State** column icon for that Interactive Update Client 2015 R1 or later entry changes to **GA** [].

The **GA** [] icon indicates that Interactive Update Client 2015 R1 or later is ready to push out to the workstation in the **toMigrate** group according to how you specified to apply updates for your implementation.

> **Note:** When the workstation in the **toMigrate** group contacts the Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server, the system adds that workstation to the NON-GROUPED group on the **Machines** page in Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server.

5. Genesys recommends that you monitor the Interactive Update 1.0 Provider **Activity** page on the on the CIC 3.0 server to check for any problems that can occur with applying Interactive Update Client 2015 R1 or later to the workstations in the **toMigrate** group. The following example illustrates that the Interactive Update Client 2.0 failed to update on a computer.

Client-side notification of the Interactive Update Client 2015 R1 or later installation

Client-side notification of the Interactive Update Client 2015 R1 or later installation (major version upgrade) varies, depending on how you specified to apply updates, and, if applicable, when and how users decide to check for updates. Generally speaking, users see the same messages and toast notifications they are used to seeing for other updates.

If you continue immediately to complete Part 2 of the migration process, depending on how you specified to apply updates, the migrated workstations may receive *all* the necessary updates for the migration to CIC 2015 R1 or later the next time that the Interactive Update Client 1.0 Service checks for updates. In this situation, after the system applies Interactive Update Client 2015 R1 or later to the workstations, Interactive Update Client 2015 R1 or later checks for updates. If any CIC 2015 R1 or later workstation application installs and updates are uploaded to Interactive Update Provider 2015 R1 or later and marked as GA already, as described in Part 2 of the migration process, the system applies them at this time.

> **Note:** If a message appears, indicating that **Another program is being installed**, it might require one or more logons and manual checks for updates.

Part 2: Client workstation upgrade tasks on Interactive Update Provider 2015 R1 or later

This section describes the client workstation upgrade tasks on Interactive Update Provider 2015 R1 or later.

Computers in Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server

When the workstations in each group that has the **Allow Interactive Update Migration** check box selected contacts the Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server, the system adds those workstations to the default group on the **Groups** page in Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server.

You can choose to group the migrated workstations and any other existing CIC 2015 R1 or later workstations as appropriate for your CIC 2015 R1 or later implementation. For more information about computer groups, see the *Interactive Update Technical Reference*.

Add the latest Interactive Update Client 2015 R1 or later patch as a new update

If you download and apply updates to the CIC server manually, the system doesn't add any updates to Interactive Update Client 2015 R1 or later in Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server. Follow this procedure to add the latest Interactive Update 2015 R1 or later patch as a new update.

> **Note:** If you use the PureConnect provider (updates.inin.com) to get updates on the CIC server, the system adds the latest Interactive Update 2015 R1 or later Client patch to Interactive Update Provider. Skip to Add the CIC 2015 R1 or later client workstation application installs and patches as new updates.

To add the Interactive Update Client 2015 R1 or later patch as a new update:

1. Open Interactive Update Provider 2015 R1 or later on the CIC 2015 R1 or later server and click the **Updates** page.

2. In the **Action** list box, click **Add New Update** and then click the arrow [ ] next to it.

3. In the **Add New Update** dialog box, click **Browse**.
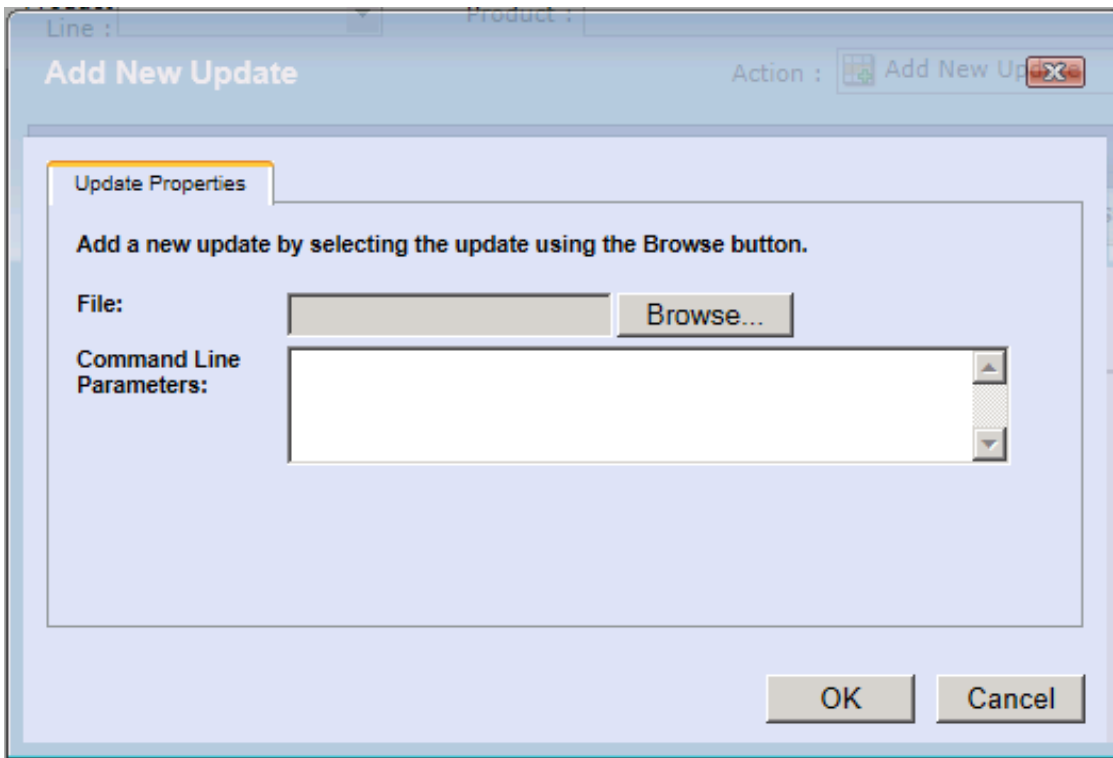
4. In the **Choose File to Upload** dialog box, browse to the `\\I3\CIC\Install\IUpdate_Client` share and then click **Open**.

5. In the `CIC_Update` share, select the most recent patch (for example, `IUpdateClient_2015_R1_Patch3.msp`) and then click **Open**.

   The system adds the path (for example, `\\I3\CIC\Install\IUpdate_Client\IUpdateClient_2015_R1_Patch3.msp`) to the **File** box in the **Add New Update** dialog box.
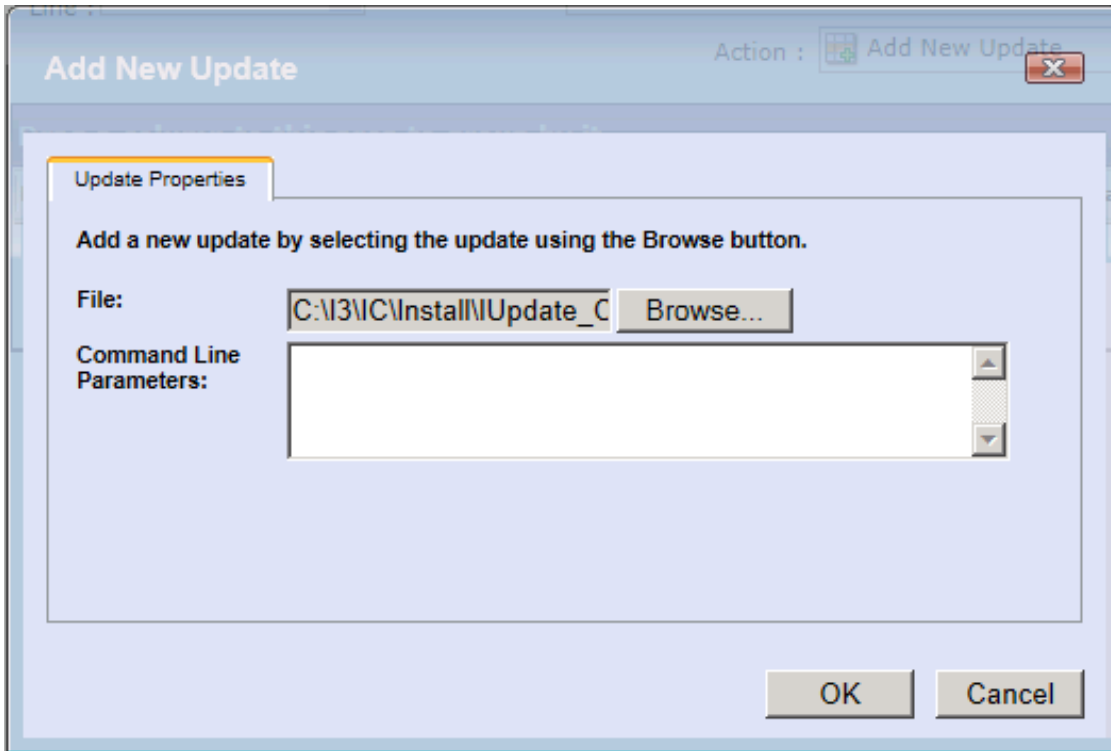
6. Click **OK**. An **Update Info** message shows that the update added successfully.

7. Click **OK**. The Interactive Update Client 2015 R1 or later patch update appears on the **Updates** data grid, with the **pre-Approval** [

    ] icon in the **Current State** column.

Add the CIC 2015 R1 or later client workstation application installs and patches as new updates

Note: Starting with CIC 2015 R3, Interaction Desktop replaces Interaction Client .NET Edition as the primary CIC client.

This task consists of:

- Adding the IC User Applications (64-bit) GA install as a new update (major upgrade version) pulled from the `UserApps_64bit` share on the CIC 2015 R1 or later server. For more information, see About CIC 3.0 to CIC 2015 R1 or later client workstation upgrade installations.
- Setting a Command Line Parameter `ICSERVERNAME` to the CIC 2015 R1 or later server name so that users don't have to specify the new Host server name (CIC 2015 R1 or later server) when they first log on to Interaction Desktop.
- Adding the latest IC User Applications (64-bit) patch as a new update, pulled from the `UserApps_64bit` share on the CIC 2015 R1 or later server.

To add the IC User Applications 64- bit GA install and patch as new updates:

1. In the Interactive Update Provider 2015 R1 or later **Updates** page, click **Add New Update**.
2. In the **Add New Update** dialog box, click **Browse**.
3. In the **Choose File to Upload** dialog box, browse to the `\\I3\CIC\Install\UserApps_64bit` share and then click **Open**.
4. Select the install (for example, `ICUserApps_64bit_2015_R1.msi`, GA Install) and then click **Open**.

    The system adds the path (for example, `\\I3\CIC\Install\UserApps_64bit\ICUserApps_64bit_2015_R1.msi`) to the **File** box in the **Add New Update** dialog box.
5. In the **Command Line Parameters** box, type `ICSERVERNAME=`*servername*. Genesys recommends using a fully qualified domain name (FQDN), not a short name.
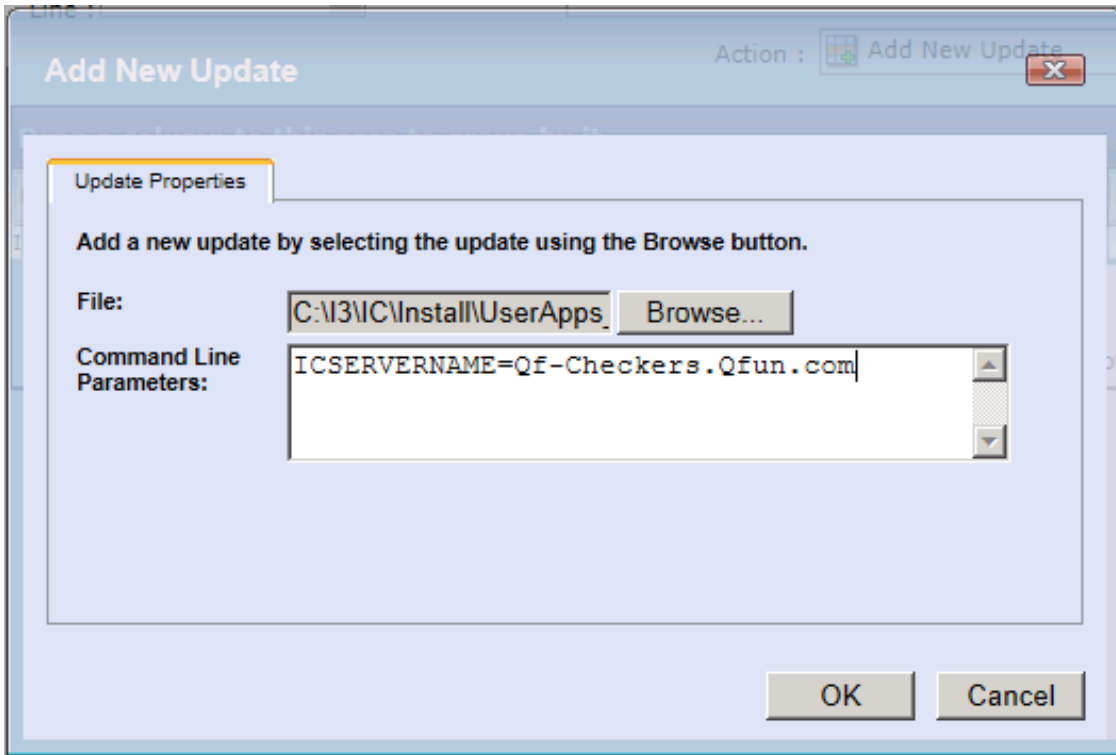
This action changes a configuration setting on all workstations receiving the IC User Applications install so that users don't have to specify the new Host server name (CIC 2015 R1 or later server) when they first log on to Interaction Desktop.

6. Click **OK**. An **Update Info** message shows that the IC User Applications 64-bit install added successfully.

7. Click **OK**. The IC User Applications (64-bit) GA install appears on the **Updates** data grid, with the **pre-Approval** [🔴] icon in the **Current State** column.

> **Note:** The change in the SERVERNAME property to the CIC 2015 R1 or later server name displays in the **Advanced Properties** tab under the data grid in **MSI Properties**.

8. Repeat steps 1 through 7 to add the latest patch (for example, `ICUserApps_64bit_2015_R1_Patch_1.msp`) from the `UserApps_64bit` share, with the exception of adding the `ICSERVERNAME` Command Line Parameter (step 5), which you don't need to repeat.

The IC User Applications (64-bit) SU 1 update appears on the **Updates** data grid, with the **pre-Approval** [🔴] icon in the **Current State** column.

Add the Client Language Plugins as new updates

This task consists of adding the Client Language Plugins for the CIC 2015 R1 or later client workstation applications as new updates (major version upgrades), pulled from the appropriate shares on the CIC 2015 R1 or later server.

> **Note:** For information about previously installed language files and registry settings, see About CIC 3.0 to CIC 2015 R1 or later client workstation upgrade installations.

To add the Client Language Plugins as new updates:

1. In the Interactive Update Provider 2015 R1 or later **Updates** page, click **Add New Update**.
2. In the **Add New Update** dialog box, click **Browse**.
3. In the **Choose File to Upload** dialog box, browse to the `\\I3\CIC\Install\UserApps_64bit` share and then click **Open**.
4. Select the **LanguagePlugins** directory and then click **Open**.
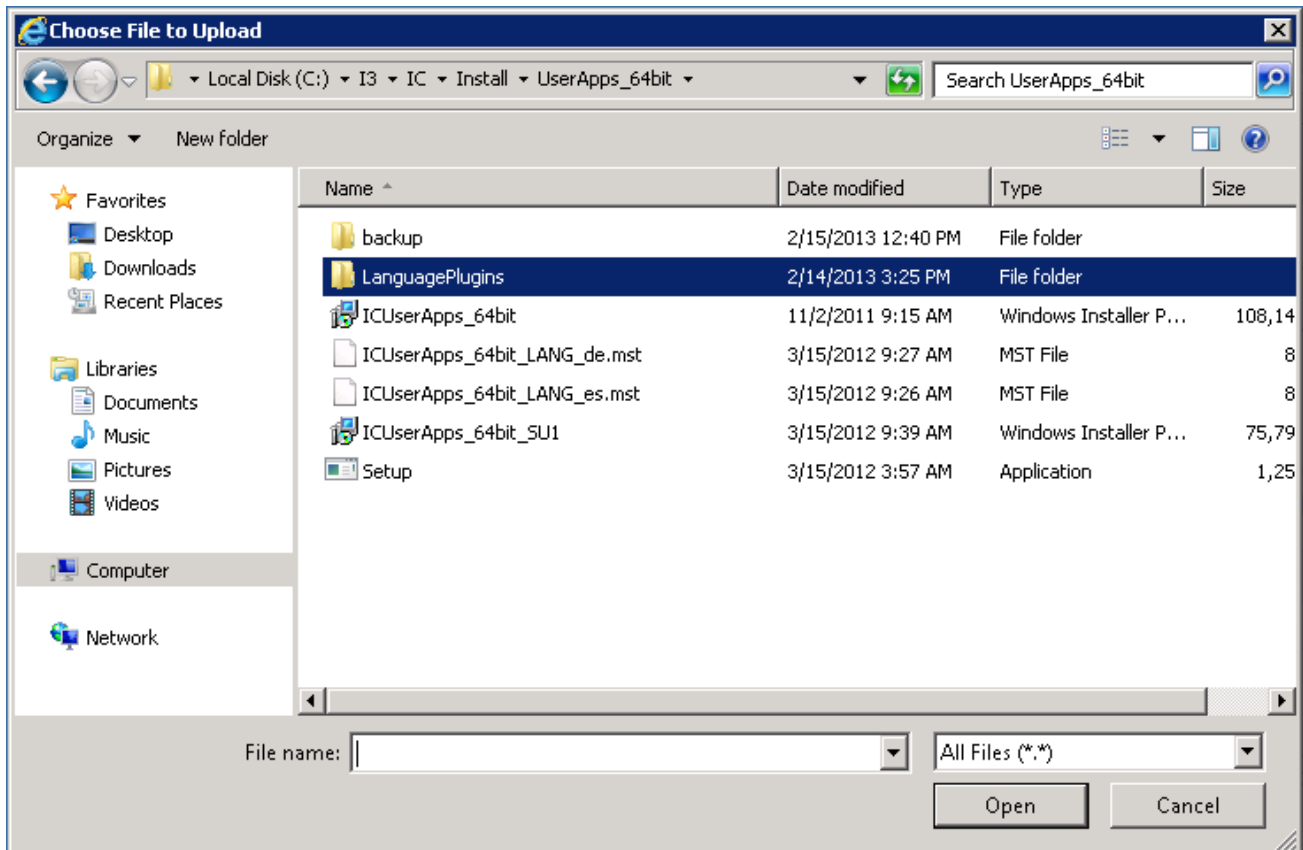
5. In the `LanguagePlugins` directory, select the appropriate language (for example, IC User Applications German Language Plugin `ICUserApps_LanguagePlugin_de_2015_R1.msi`) and then click **Open**.

   The system adds the path (for example, `\\I3\CIC\Install\UserApps_64bit\LanguagePlugs\ICUserApps_LanguagePlugin_de_2015_R1.msi`) to the **File** box in the **Add New Update** dialog box.
6. Click **OK**. An **Update Info** message shows that the IC User Applications German LanguagePlugin install added successfully.
7. Click **OK**.
8. Repeat steps 5 through 7 to add another language (for example, IC User Applications Spanish Language Plugin install, `ICUserApps_LanguagePlugin_es_2015_R1.msi`) as a new update. The two Language Plugin installs appear on the

   Updates data grid, with the **pre-Approval** [⊘] icon in the **Current State** column.

Mark the installs and SUs as GA and push out to client workstations

In the final task on the CIC 2015 R1 or later server, mark the Interactive Update 2015 R1 or later patches and CIC 2015 R1 or later client workstation installs and patches as GA and push them out to workstations according to how you specified to apply updates for your implementation.

To mark the installs and SUs as GA and push out to client workstations:

1. In the Interactive Update Provider 2015 R1 or later **Updates** page, select all the installs and updates, right-click, and then select **Change Current State -> Mark as 'GA'**.

2. In the **Updates** page data grid, the **Current State** column icon for the installs and updates changes to **GA** [].

    The **GA** icon indicates that the installs and updates to workstations apply according to how you specified to apply updates for your implementation.

Client-side notification of the Interactive Update 2015 R1 or later patch and CIC 2015 R1 or later client workstation installation

Client-side notification of the Interactive Update Client 2015 R1 or later installation (major version upgrade) varies, depending on how you specified to apply updates, and, if applicable, when and how users decide to check for updates. Generally speaking, users see the same messages and toast notifications they are used to seeing for other updates.

If you continue immediately to complete Part 2 of the migration process, depending on how you specified to apply updates, the migrated workstations may receive *all* the necessary updates for the migration to CIC 2015 R1 or later the next time that the Interactive Update Client 1.0 Service checks for updates. In this situation, after the system applies Interactive Update Client 2015 R1 or later to the workstations, Interactive Update Client 2015 R1 or later checks for updates. If any CIC 2015 R1 or later workstation application installs and updates are uploaded to Interactive Update Provider 2015 R1 or later and marked as GA, as described in Part 2 of the migration process, the system applies them at this time.

> **Note:** If a message appears, indicating that **Another program is being installed**, it might require one or more logons and manual checks for updates.

Migrate CIC 3.0 Workstations Using Setup.exe

> **Note:** Genesys hasn't updated most of this section for 2015 R1 or later.

This section describes how to migrate/upgrade CIC 3.0 SU 14 or later client workstation applications to CIC 2015 R1 or later by running `Setup.exe` from the appropriate workstation application share on the CIC server. The procedure includes migrating/upgrading localized versions of CIC 3.0 client workstation applications.

About Setup.exe

`Setup.exe` is available in each of the CIC client workstation application shares on the CIC 2015 R1 or later server created during the CIC 2015 R1 or later server installation. For a detailed explanation of workstation application share directory contents, see "Client Workstation Installations" in the *PureConnect Installation and Configuration Guide* or "CIC Language Pack Client Workstation Installation" in the *CIC Language Pack Technical Reference* in the PureConnect Documentation Library.

`Setup.exe` installs CIC client workstation applications manually on *individual client workstations*. Use `Setup.exe` to:
- Complete a new CIC client workstation application installation (`.msi`) or apply the latest CIC client workstation release component (`.msi`).
- Install multiple Client Plugins (`.msi`) for the CIC client workstation application or apply the latest Client Plugin release components (`.msi`).
- Provide a localized CIC client workstation application install GUI.

IC User Applications (32-bit and 64-bit)

This section describes how to upgrade CIC 3.0 User Applications to CIC 4.0 using `Setup.exe`.

IC User Applications (32-bit and 64-bit) requirements

- Ensure that you fulfilled the CIC 4.0 client workstation software requirements as described in Workstation Migration Planning.
- Ensure that you reviewed Changes to IC User Applications in CIC 4.0.
- Ensure that the person installing IC User Applications has administrative permissions on the local computer and other permissions.
- Close Microsoft Outlook and any other applications running on the workstation and turn off virus scanning.

Upgrade Interactive Update Client

This section describes how to run Setup.exe to upgrade Interactive Update 1.0 to Interactive Update 2.0 SU 3.

> **Note:** After you upgrade Interactive Update using `Setup.exe`, you can choose to upgrade IC User Applications and the other CIC client workstation applications using Interactive Update or you can update them using Setup.exe as described in this section.

To upgrade Interactive Update Client:

1. Click **Start.**
2. In **Search programs and files**, type `\\`*servername*`\` where *servername* is the **CIC 4.0 server name**, to view the shares on the CIC server.
3. Double-click the Interactive Update Client install share `IC_IUpdate` in the list.
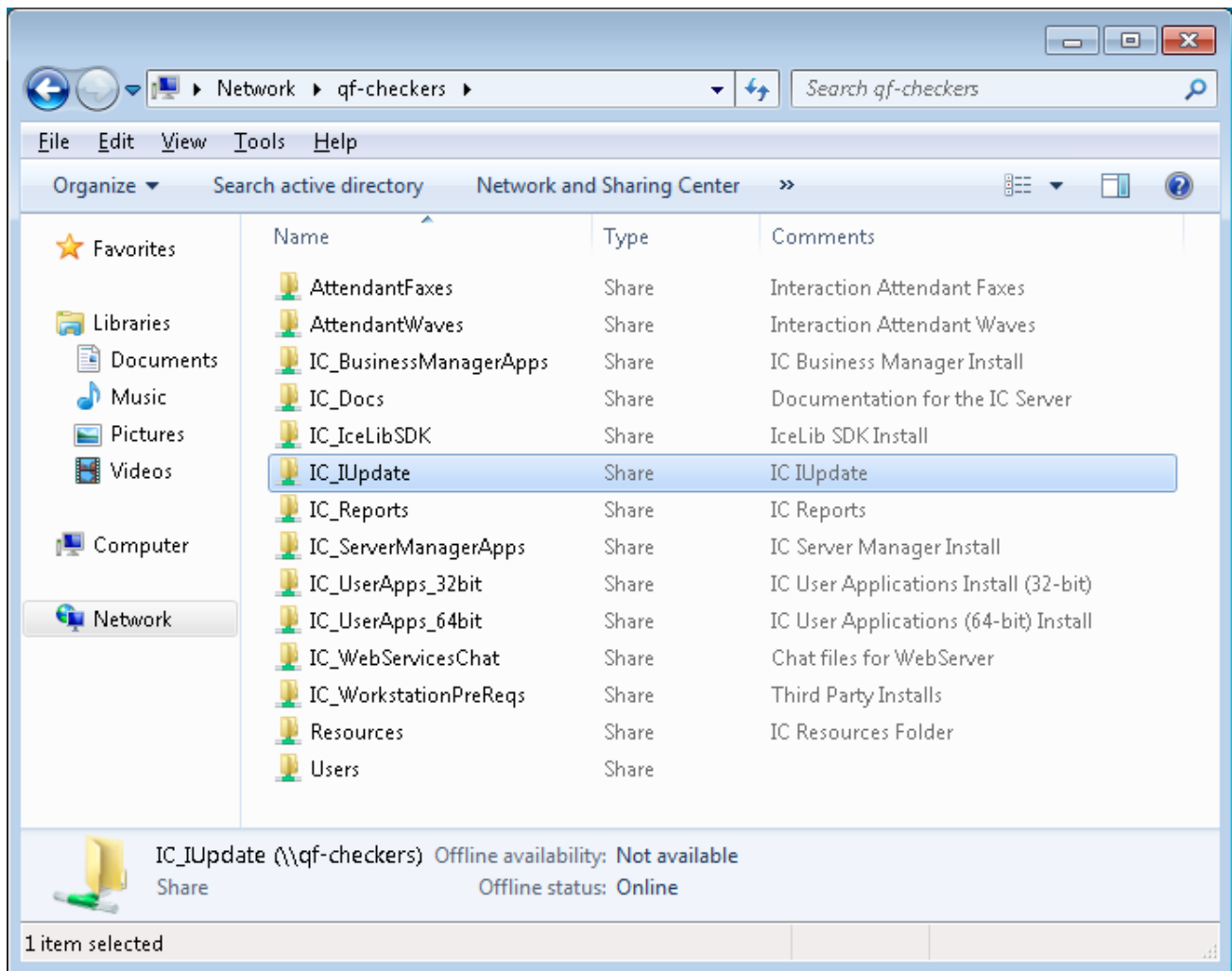
4. Review the contents of the `IC_IUpdate` share.
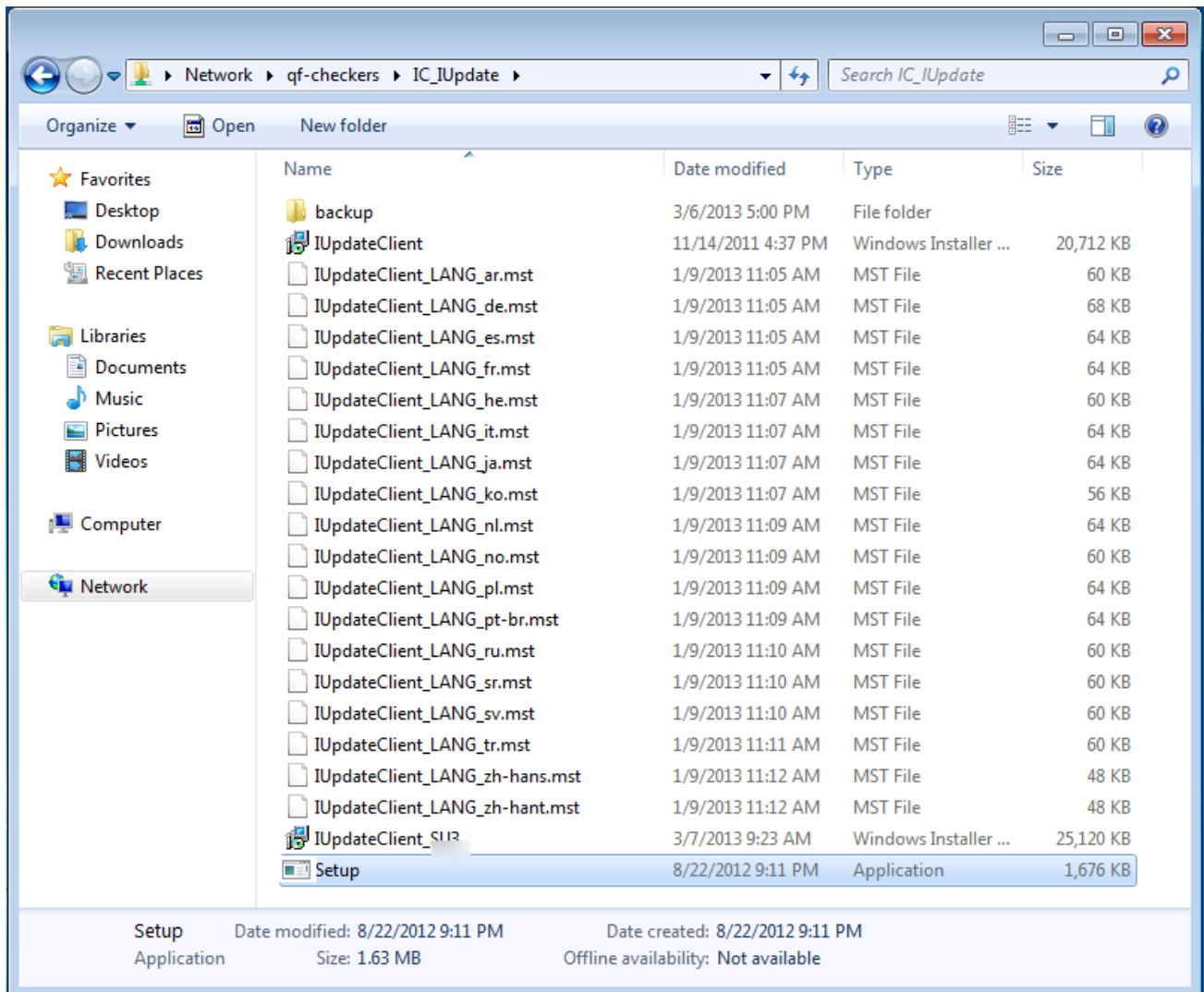
In this example, the `IC_IUpdate` share contains:

- Backup directory
- `IUpdate_Client.msi` install
- `IUpdate_Client_SU3.msp` SU component
- `IUpdate_Client_LANG.mst` files for all available languages for the Interactive Update Client install UI

5. Double-click `Setup.exe` in the `IC_IUpdate` share.
6. In the **Setup.exe** dialog box, in the list box, click the language for the Interactive Update Client install to display in and then click **OK**.
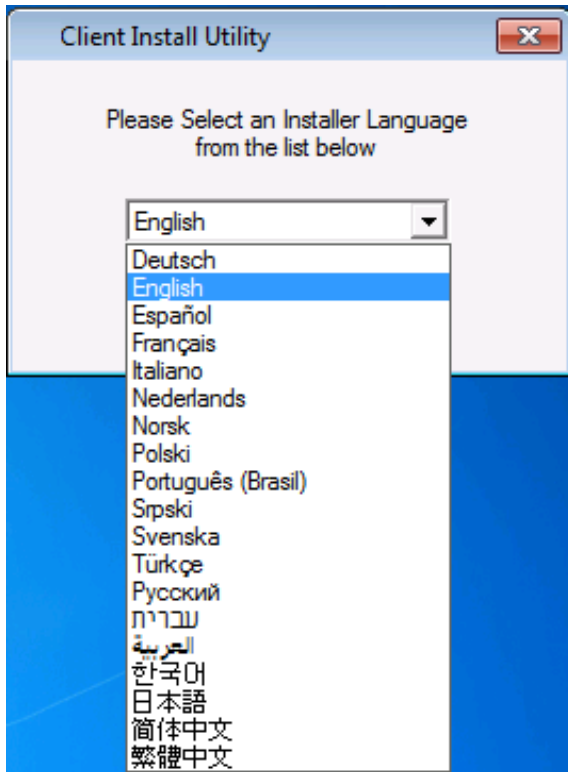
Unlike the other CIC client workstation applications, all languages supported currently (including English) are available to select.

> **Note:** This dialog box appears only in the initial run of `Setup.exe` in the `IC_IUpdate` share. The next time you run `Setup.exe`, the Interactive Update Client install appears in the language that you selected the first time you ran `Setup.exe`.

7. Review the contents of the next **Setup.exe** dialog box.
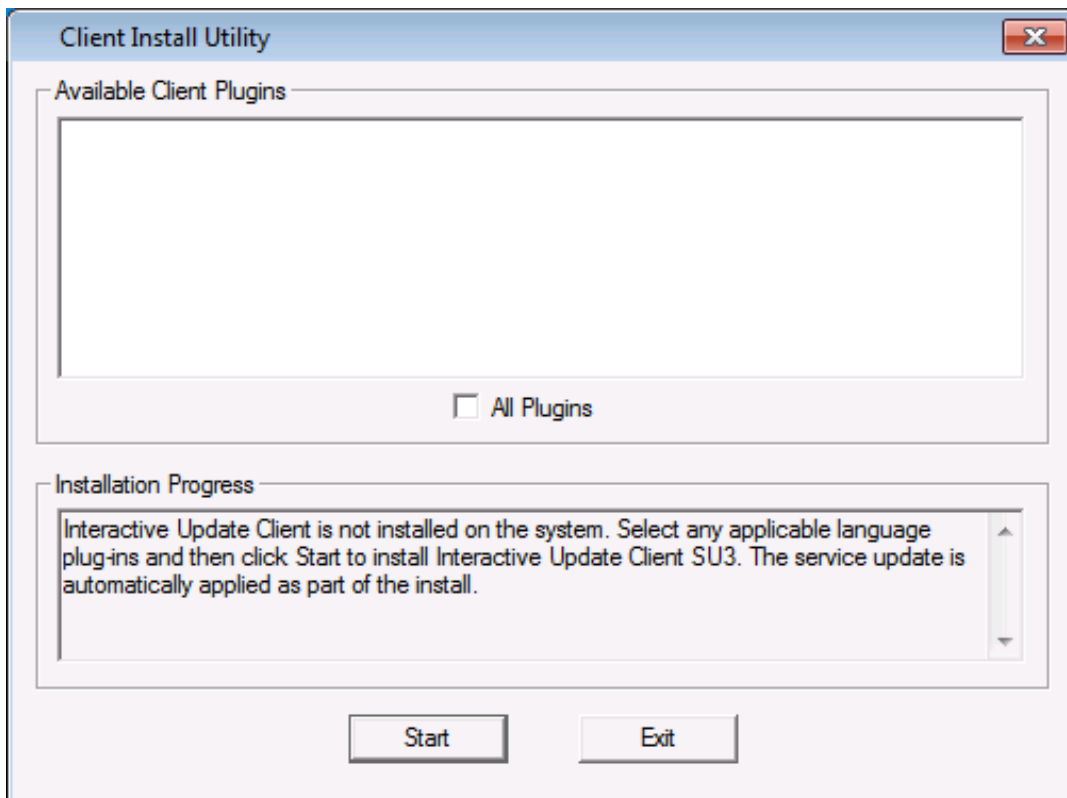
As noted in **Available Client Plugins**, no plugins for Interactive Update Client are available. The reason is because Interactive Update Client does not have associated Client Language Plugins.

As the **Installation Progress** message indicates, Setup.exe applies the SU (`.msp`) when it runs the install (`.msi`), if applicable.

8. Click **Start** to launch the Interactive Update Client 2.0 install. The Interactive Update Client install starts.
9. On the **Welcome** page, click **Next**.
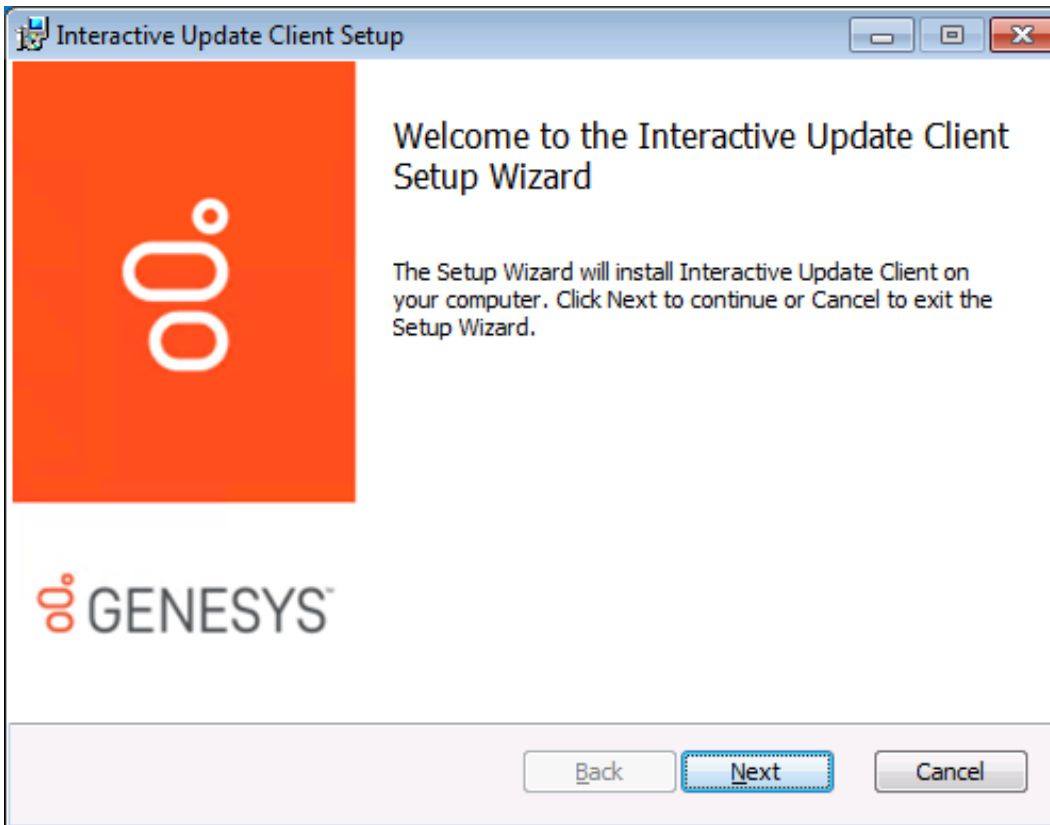
On the **Interactive Update Provider Server** page, the **Interactive Update Provider server** box contains the Interactive Update Provider (**host CIC 3.0 server**) name.
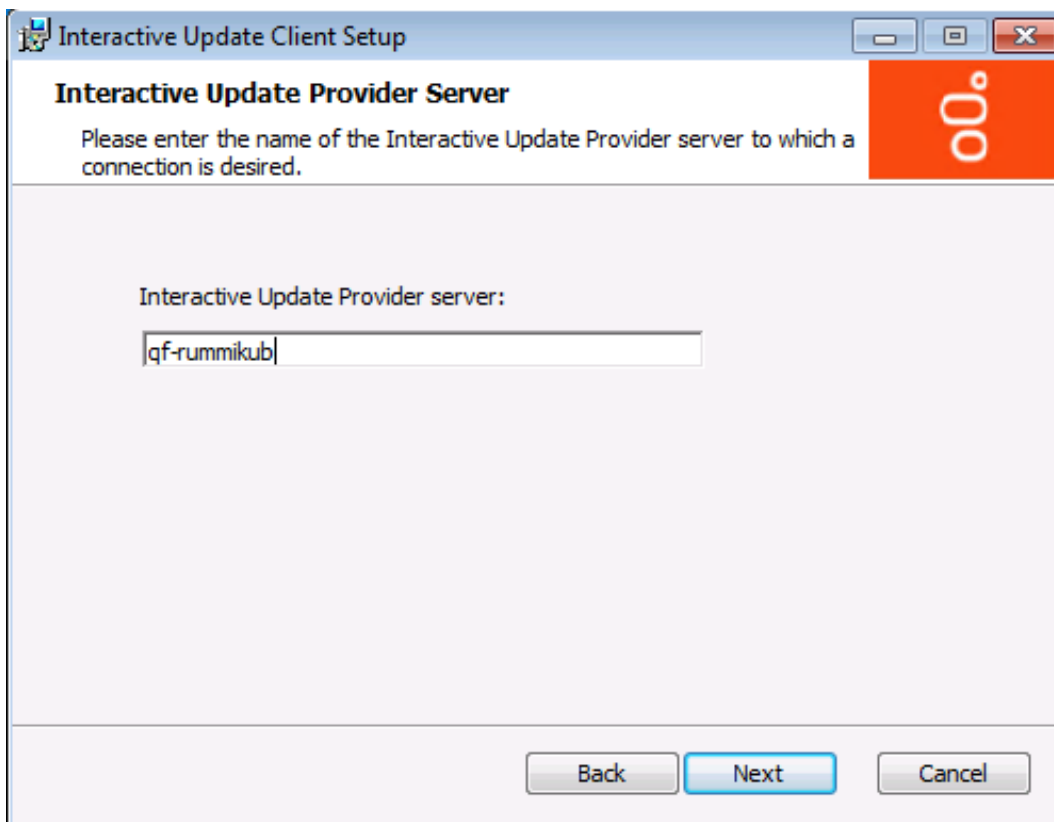
10. In the **Interactive Update Provider server** box, type the **host CIC 4.0 server** name and then click **Next**. Genesys recommends using a fully qualified domain name (FQDN), not a short name.
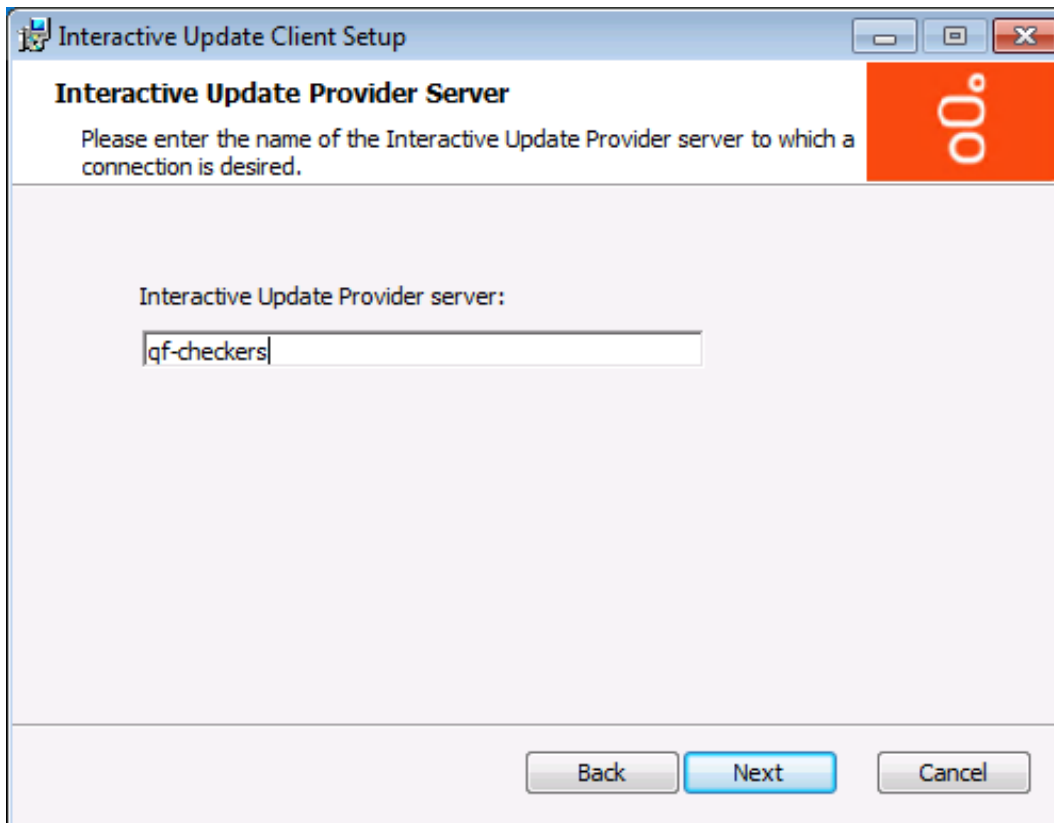
Notes:
- If you have a CIC Switchover architecture and you created a pair of commonly named DNS A records pointing to each server as part of the IP phone network configuration for managed phones, do not use that common name value here. Instead, use one of the actual CIC server names. Genesys recommends using a fully qualified domain name (FQDN), not a short name.
- After you complete this installation, verify the fully qualified domain name (FQDN) resolution to ensure client connectivity with the host CIC server. For more information, see Verify FQDN resolution (IC User Applications).

11. When you are ready to begin the installation, click **Install**.
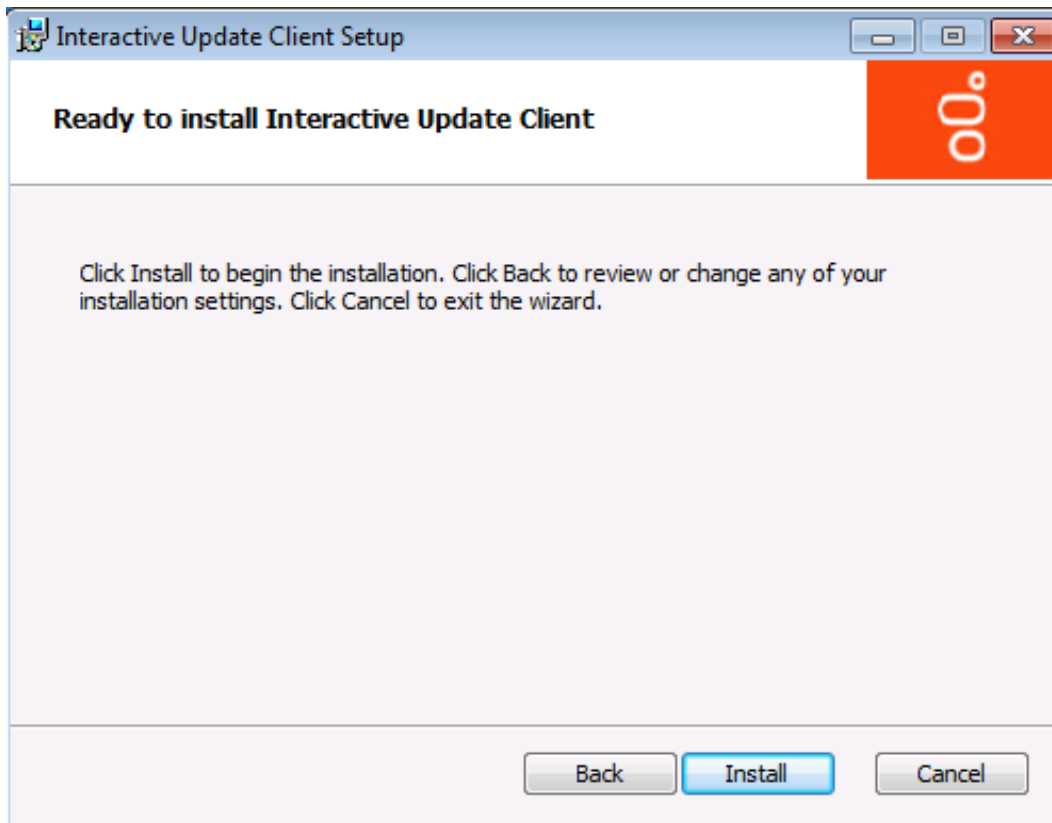
As the installation continues, a status bar indicates the progress.

As part of this process, the install uninstalls the Interactive Update 1.0 components before installing the 2.0 version of the components.

12. On the **Completed Interactive Update Client Setup** page, click **Finish**.
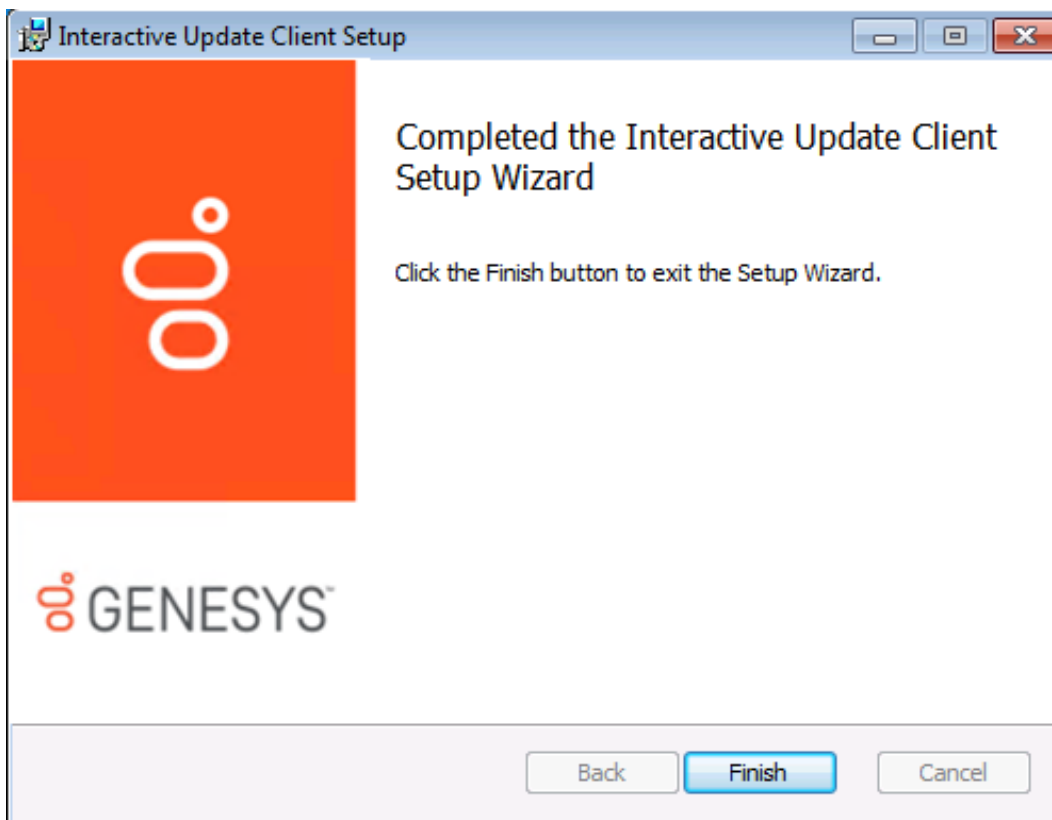
13. On the **Setup.exe** page, review the **Installation Progress** message and then click **Exit** to close `Setup.exe`.
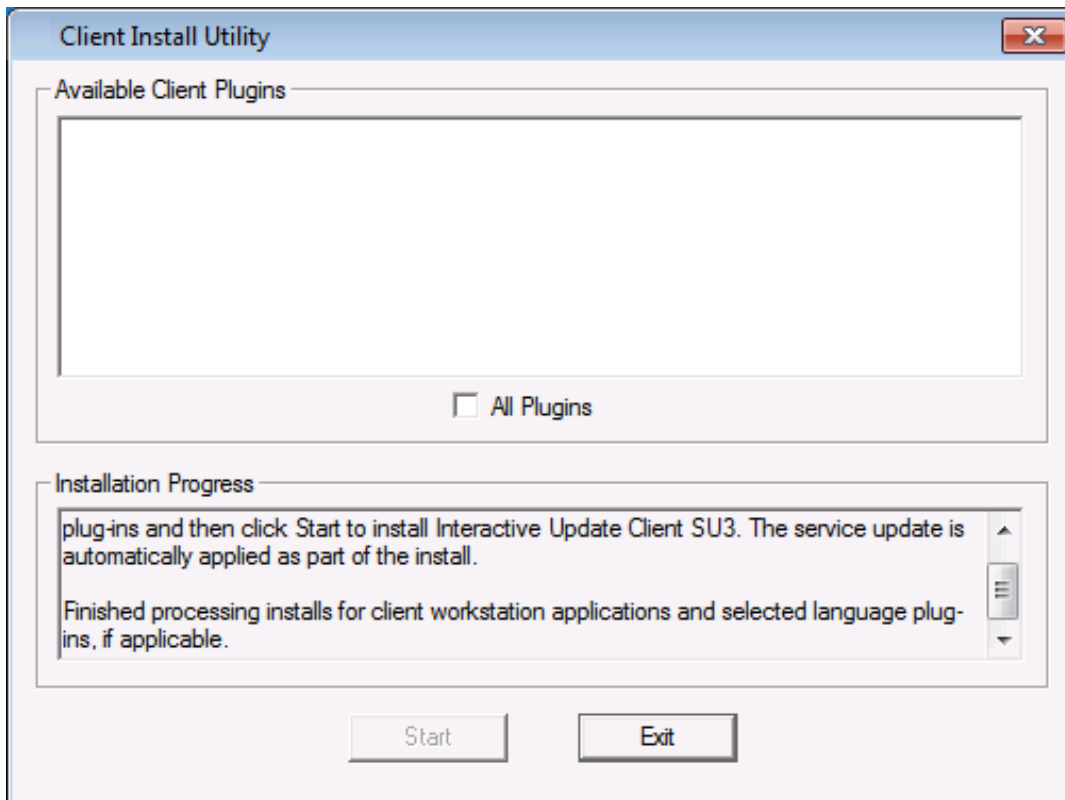
14. When asked to restart the computer, click **Yes**.

   Immediately following the restart, the Interactive Update Client service looks for any PureConnect products or components installed on the workstation.

   It displays one of the following notices:

- **Your PureConnect software is currently up to date:** This message indicates that no updates were available. If this message appears, proceed to the next step.
- **A PureConnect software update is ready to be installed. Please click here to begin:** This message indicates that more updates are available. If this message appears, click the message to open a wizard that walks you through the process of downloading and applying the updates. The computer might require a restart. Ensure that all updates downloaded and applied before proceeding to the next step.

   You can choose to upgrade IC User Applications and the other CIC client workstation applications using Interactive Update or proceed to update them manually using `Setup.exe` as described in the following sections.

Upgrade IC User Applications

> **Note:** The current migration package requires CIC 4.0 SU 3 on the CIC server and workstations. Genesys hasn't updated this example scenario for this requirement.

This section describes how to run `Setup.exe` to upgrade CIC 3.0 User Applications to CIC 4.0 SU 1 with German and Spanish languages installed.

To upgrade IC User Applications:

1. On the client workstation, click **Start.**
2. In **Search programs and files**, type `\\`*`servername`*`\` where *servername* is the **CIC 4.0 server name**, to view the shares on the CIC server.

3. Double-click the IC User Apps install share appropriate for the workstation from the list, for example **IC_UserApps_64-bit**.
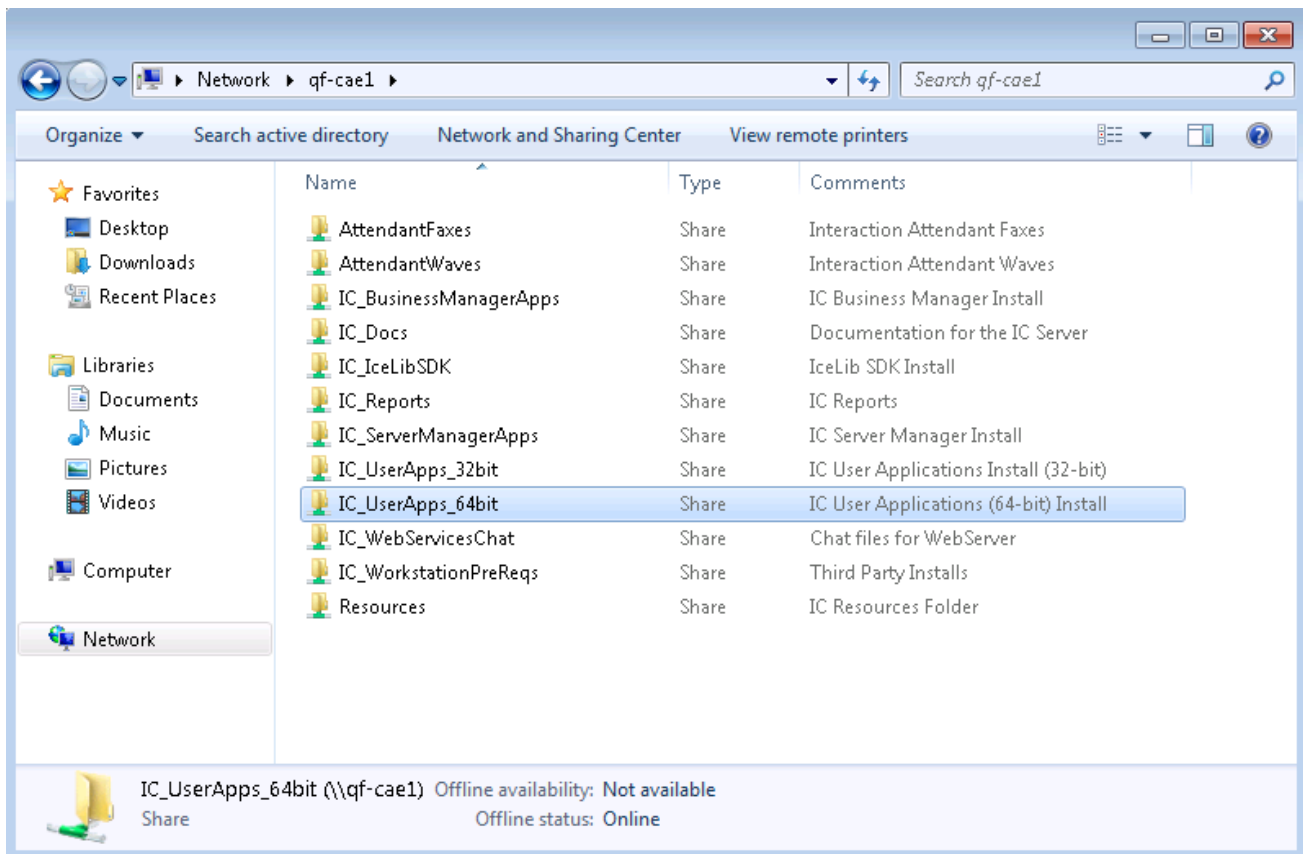
4. Review the contents of the IC User Apps install share, for example, `IC_UserApps_64-bit`, and the `LanguagePlugins` subdirectory.
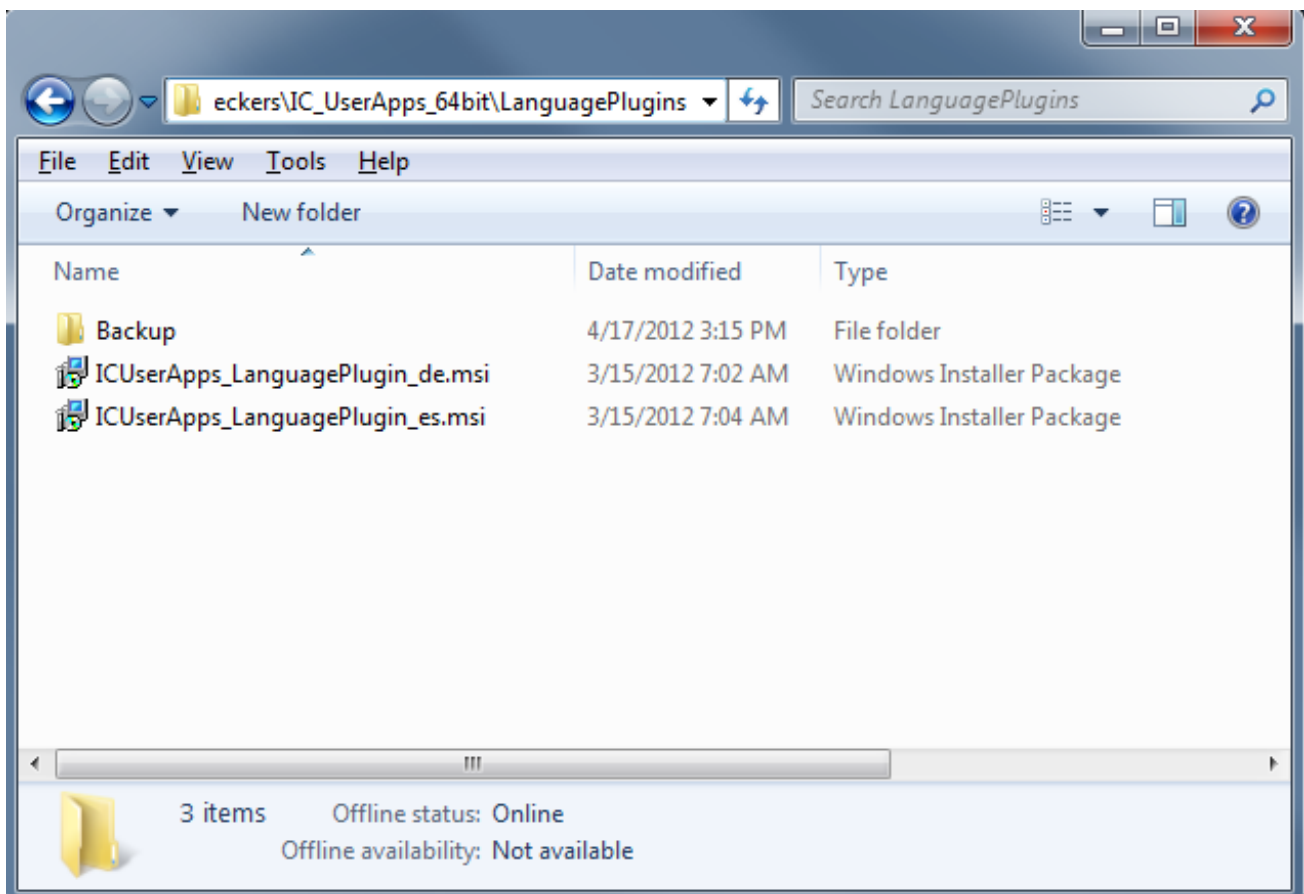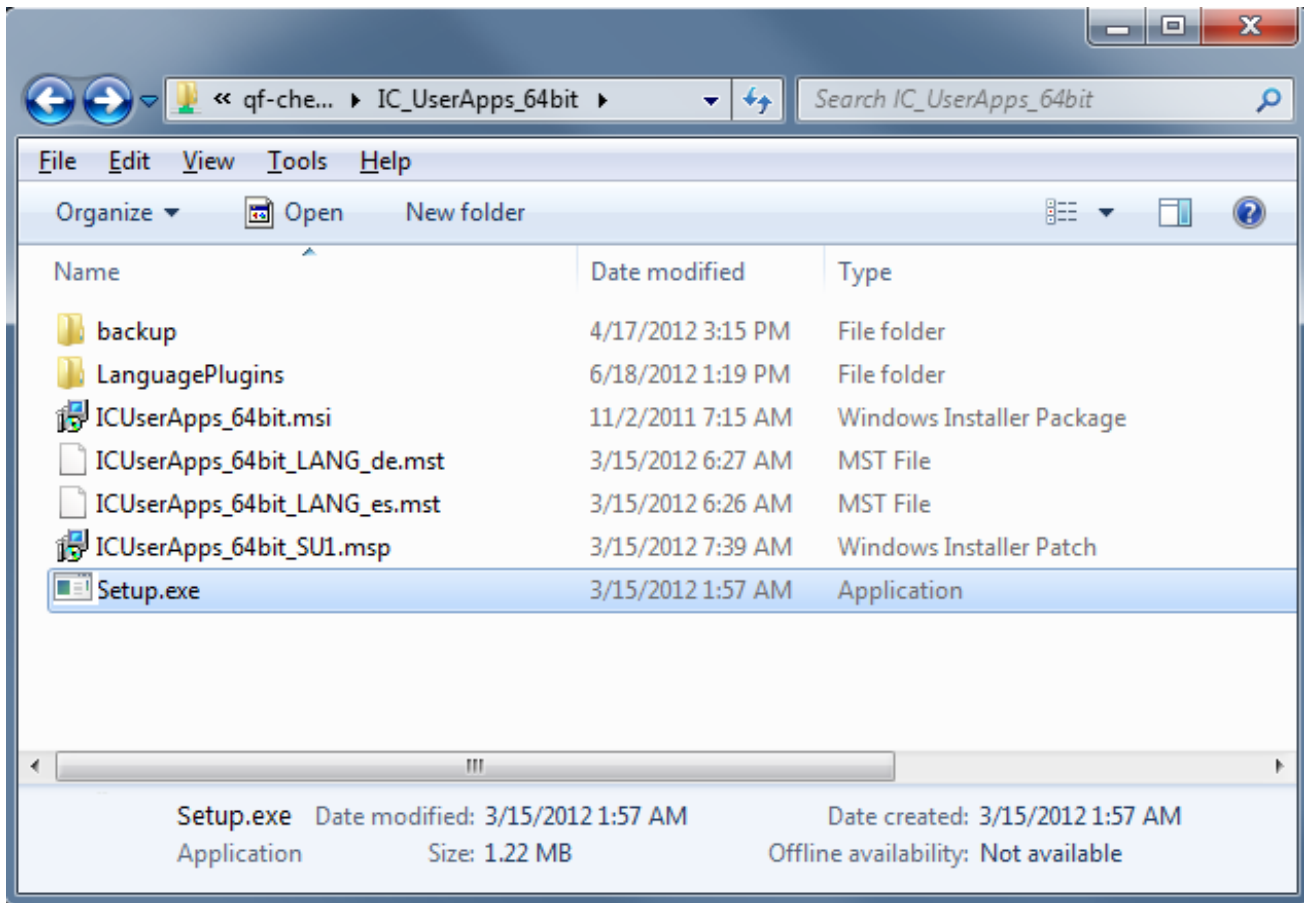
In this example, the `IC_UserApps_64bit` share contains:

- Backup directory

- Language Plugins directory: Contains German and Spanish `ICUserApps_LanguagePlugin_de.msi` and `ICUserApps_LanguagePlugin_es.msi` installs
- The `ICUserApps_64bit.msi` install
- The `ICUserApps_64bit_SU1.msp` SU component
- German and Spanish localized strings `ICUserApps_LanguagePlugin_de.mst` and `ICUserApps_64bitLanguagePlugin_es.mst` for the IC User Apps install GUI
- The `Setup.exe` utility

5. Double-click `Setup.exe` in the IC User Apps install share.
6. In the **Setup.exe** dialog box, in the list box, click the language that you want the IC User Applications install to display in and then click **OK**.
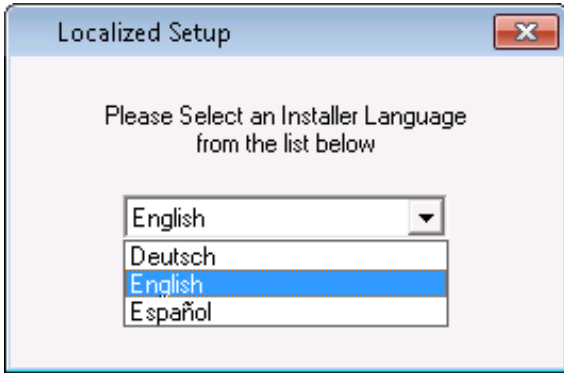
The Language Packs installed on the CIC server determine the languages displayed in the list box. (The list always includes English.) In this example, since the German and Spanish Language Packs are installed on the CIC server, English, German, and Spanish are available to select.

> **Note:** This dialog box appears only in the initial run of `Setup.exe` in the IC User Apps install share. The next time you run `Setup.exe`, the IC User Applications install automatically appears in the language you selected the first time you ran `Setup.exe`.

7. Review the contents of the next Setup.exe dialog box.
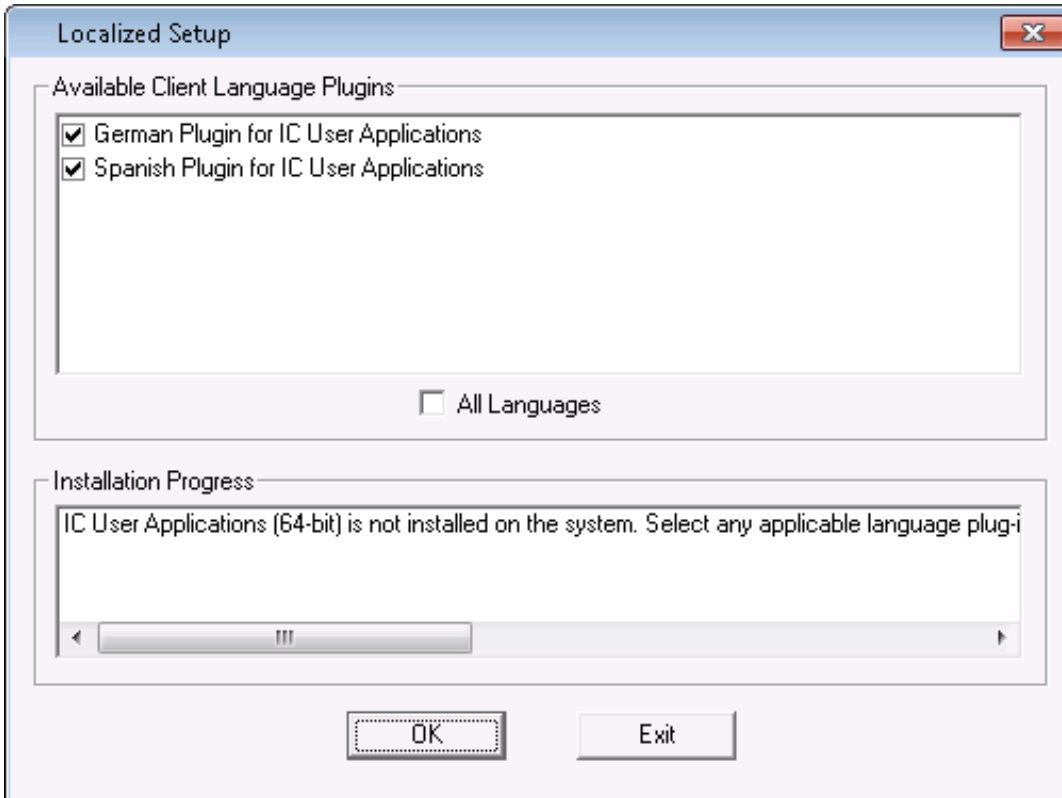
In the CIC 3.0 to CIC 4.0 migration scenario, `Setup.exe` detects any localized versions of IC User Applications installed previously and pre-selects them in the **Available Client Language Plugins** box. In this example, the 3.0 German and Spanish versions of IC User Applications are installed and pre-selected.

After `Setup.exe` starts the 4.0 IC User Applications (64-bit) install, the install uninstalls the 3.0 version of the application. For more information, see About CIC 3.0 or CIC 2015 R1 or later client workstation upgrade installations.

> **Notes:**
> - If you de-select a pre-selected Client Language Plugin, the localized 3.0 version of IC User Applications uninstalls, but the 4.0 version doesn't install. You must re-run `Setup.exe` to install the 4.0 version.
> - Genesys doesn't recommend selecting the **All Languages** check box. (If selected, the localized 3.0 versions of IC User Applications uninstall, but the 4.0 versions don't install. You must re-run `Setup.exe` to install the 4.0 versions.)
> - If you have a localized 3.0 version of IC User Applications installed but the 4.0 Language Pack is not available or not installed on the CIC 4.0 server, `Setup.exe` uninstalls the localized 3.0 version. You must re-run `Setup.exe` to install the 4.0 version, when available.

8. Click **OK** to start the 4.0 IC User Applications (64-bit) install.

9. On the **Welcome** page, click **Next**.
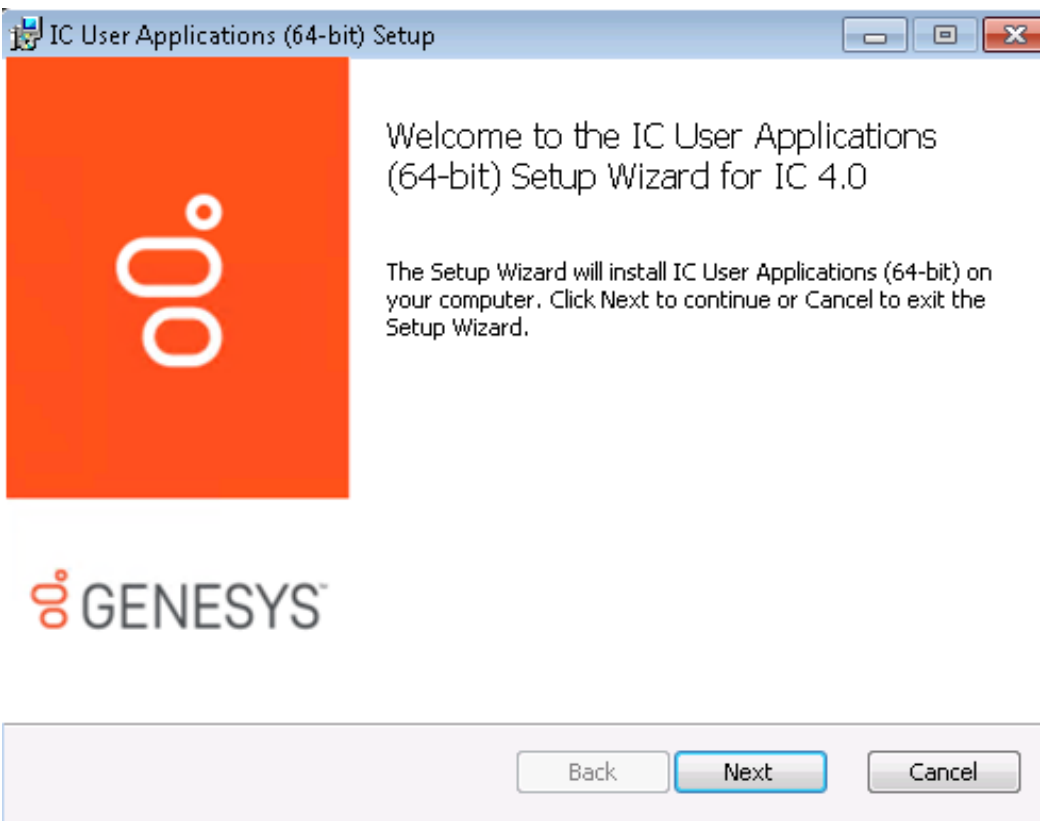
> **Note:** If you are migrating from CIC 2.3.x/2.4 to CIC 3.0, the **Remove Previously Installed Client Applications** page appears. Click **Next** to remove the older application versions.

10. On **Custom Setup** page, select or clear applications/features as needed and then click **Next**.
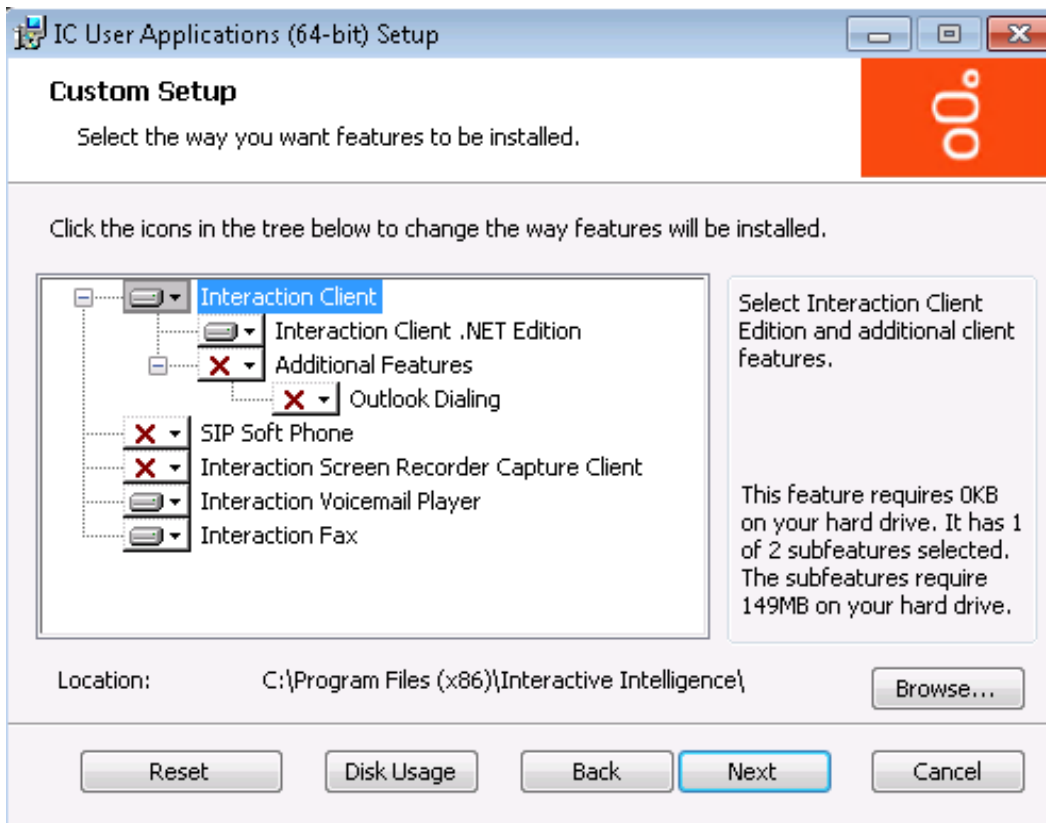
Notes:

- On a **Windows 7** workstation, if you already had **SIP Soft Phone**, **Interaction Screen Recorder Capture Client**, or both installed, or if you want to install them now, enable one or both of these applications on the **Custom Setup** page.
- On a **Windows XP** workstation, **SIP Soft Phone** and **Interaction Screen Recorder Capture Client** are not available in the **Custom Setup** page because Windows XP doesn't support them.
- Genesys recommends that you keep the default location to install the IC User Applications as `C:\Program Files(x86)\Interactive Intelligence`. To change the default location, click **Browse**.

11. If you selected **SIP Soft Phone**, **Interaction Screen Recorder Capture Client**, or both on the **Custom Setup** page, the **QoS Requirement** page appears.
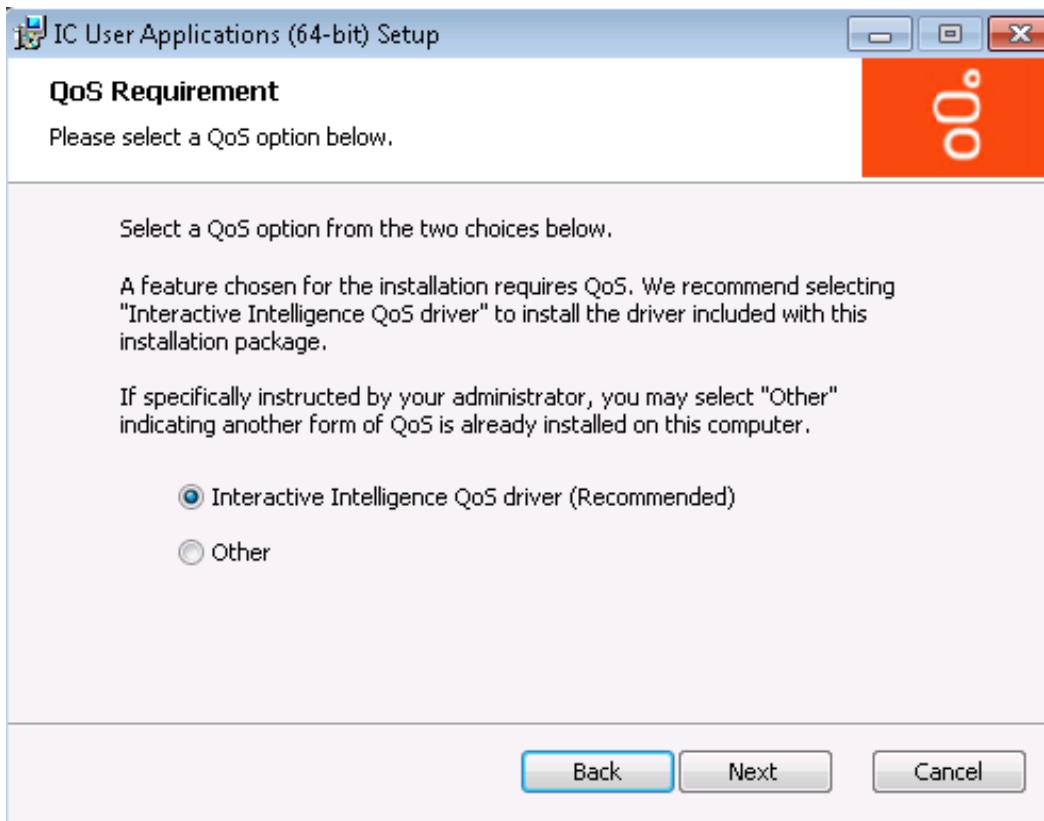
PureConnect QoS driver: This option is the default and recommended option. If selected, the install adds the Interactive Intelligence certificate to the Trusted Publishers list and then installs the driver. In most cases, adding the certificate to the Trusted Publishers list keeps the user from having to trust the certificate manually.

Other: If selected, the system doesn't add the PureConnect certificate to the Trusted Publishers list and doesn't install the driver. Genesys recommends that you do not select this option unless the administrator instructs you to select it. Selecting this option implies use of another form of QoS at the site.

If the system administrator does not allow you to modify the Trusted Publishers list, the **Windows Security** page appears. The page displays a message, explaining what to do.

For more information about the PureConnect QoS driver, see KB article: https://my.inin.com/Support/Pages/KB-Details.aspx?EntryID=Q131006915300479.

On the **CIC Server Name** page, the **CIC Server Name** box contains the **host CIC 3.0 server** name.
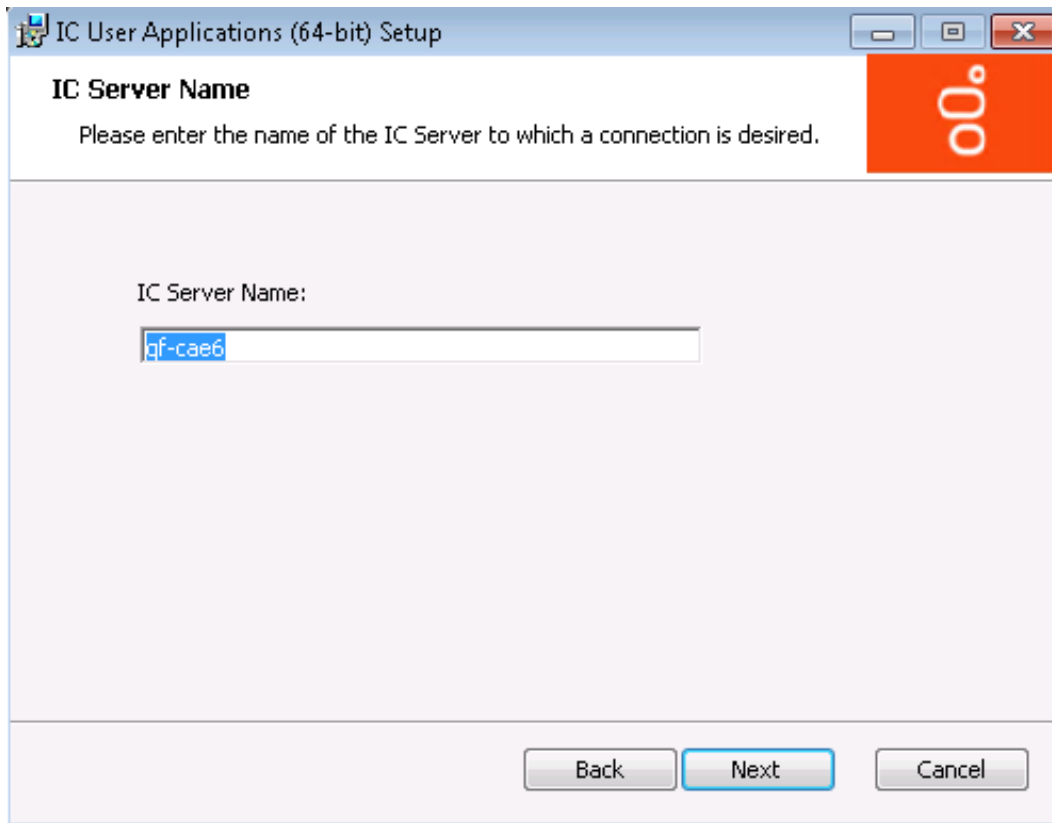
12. In the box, type the **host CIC 4.0 server** name and then click **Next**. Genesys recommends using a fully qualified domain name (FQDN), not a short name.
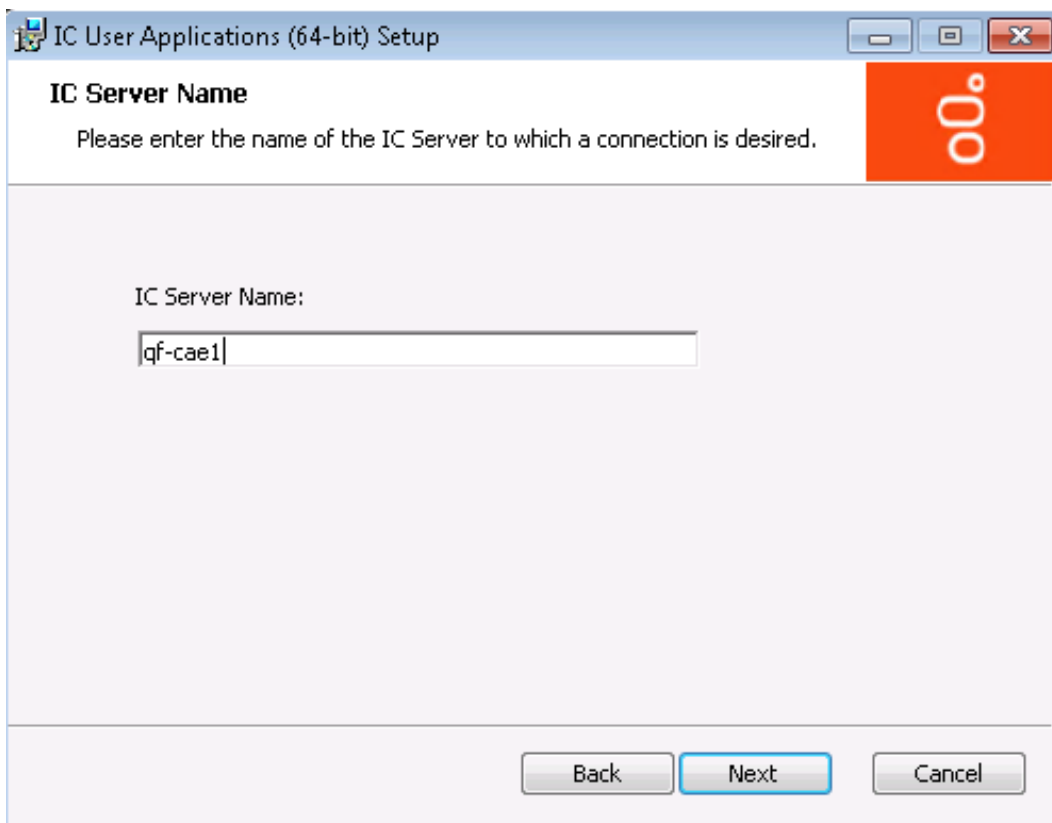
> **Notes:**
> - If you have a CIC Switchover architecture and you created a pair of commonly named DNS A records pointing to each server as part of the IP phone network configuration for managed phones, do not use that common name value here. Instead, use one of the actual CIC server names. Genesys recommends using a fully qualified domain name (FQDN), not a short name.
> - After completing this installation, verify fully qualified domain name (FQDN) resolution to ensure client connectivity with the host CIC server. For more information, see Verify FQDN resolution (IC User Applications).

13. When you are ready to begin the installation, click **Install**.
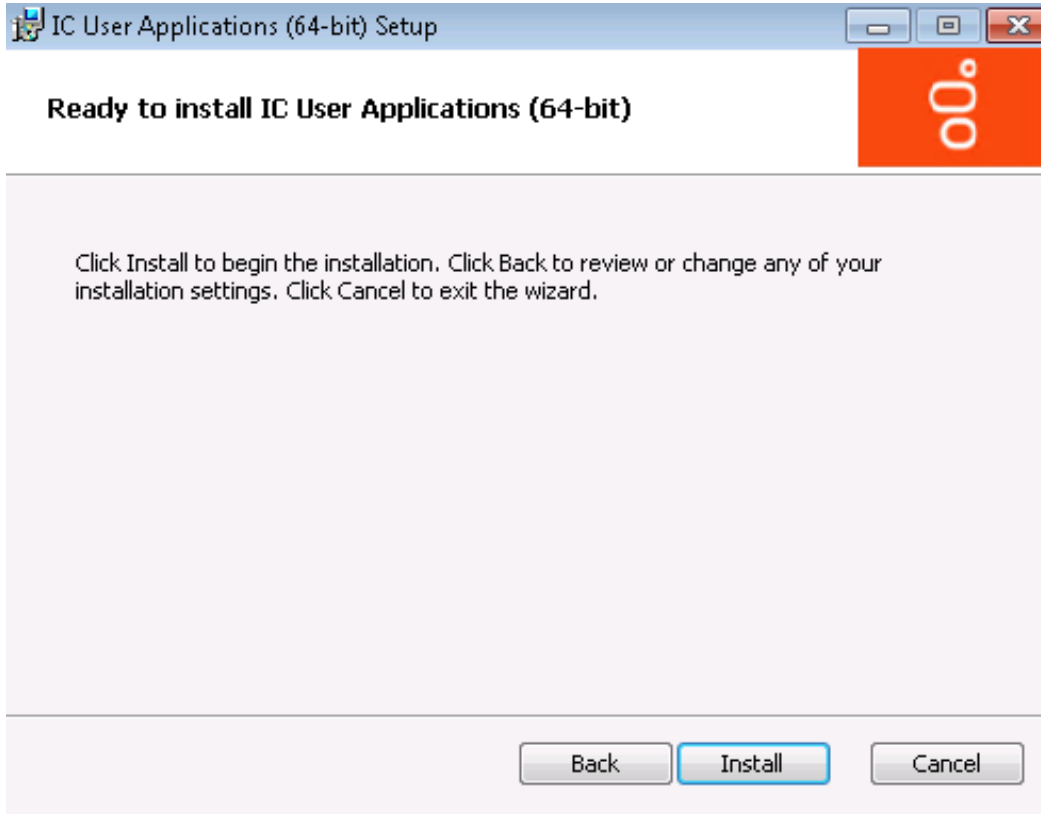
As the installation continues, a status bar indicates the progress.
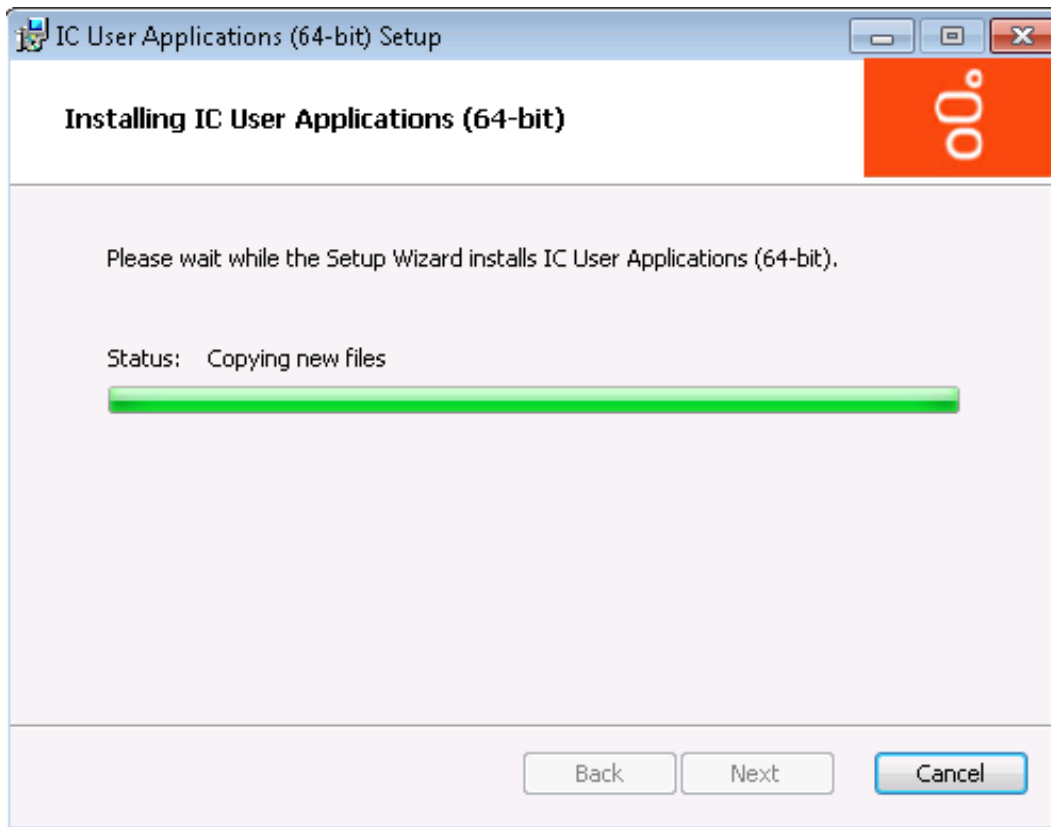
As part of this process, the install uninstalls the 3.0 IC User Applications components. For more information, see About CIC 3.0 to CIC 2015 R1 or later client workstation upgrade installations in Workstation Migration Planning.

14. When the installation is complete, click **Finish**.
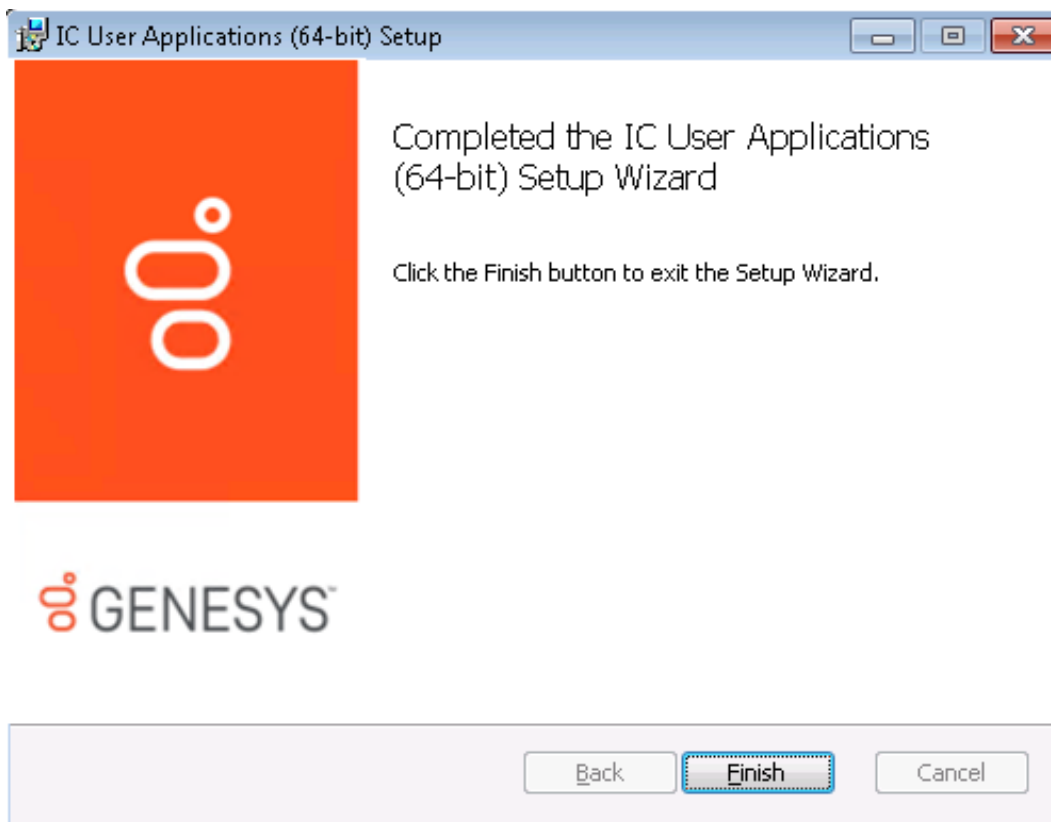
15. On the **Setup.exe** page, review the **Installation Progress** messages and then click **Exit** to close `Setup.exe`.
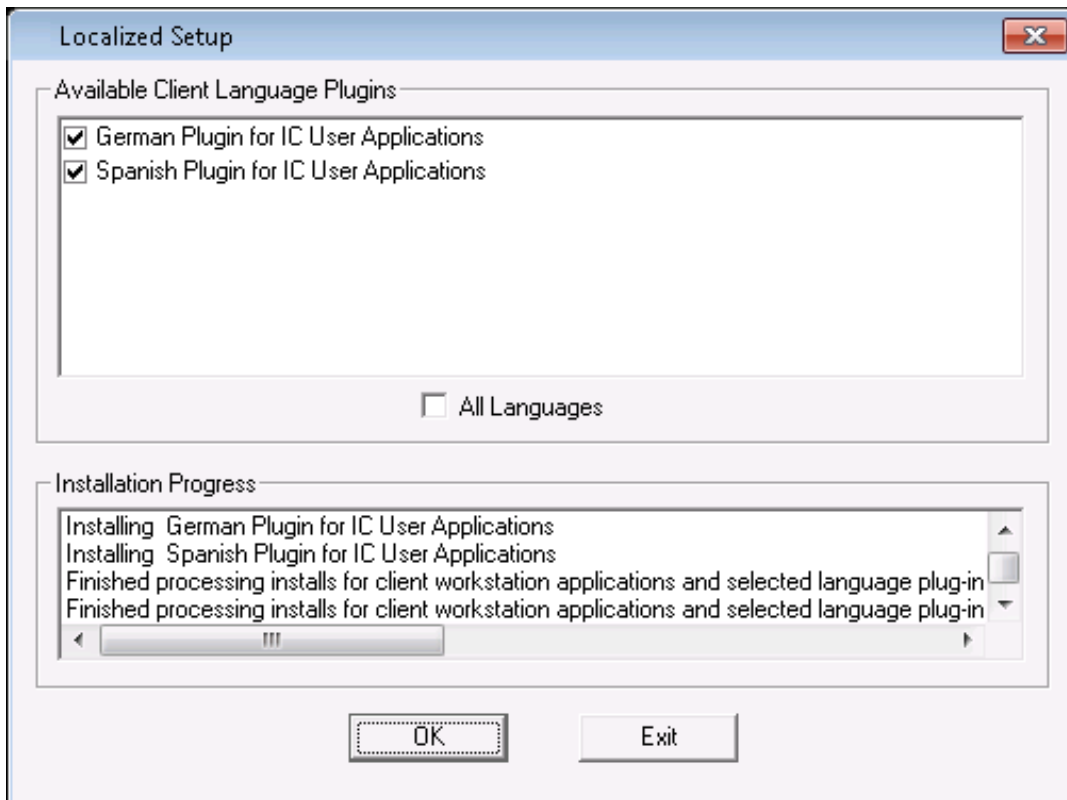
You can start the IC User Applications from links on the desktop or from **Start -> Programs -> Interactive Intelligence**.

> **Note:** Since the CIC server name changed from the CIC 3.0 server to the CIC 4.0 server as part of the IC User Applications installation, links to user applications may point to the CIC 3.0 server. Specifying the correct credentials when logging on to these applications the first time after the upgrade should resolve the problem.

Verify FQDN resolution (IC User Applications)

The network administrator completes the following procedure to verify fully qualified domain name (FQDN) resolution to ensure client connectivity with the host CIC server. You can complete this simple procedure at any point after the host CIC server has joined to the domain. If the CIC servers are part of a Switchover pair, verify FQDN resolution from a workstation for both servers.

1. In a command window from the workstation, ping the short name of the host CIC server.
2. Obtain the IP address from the ping and run an NSlookup on the IP address.

If the client fails to connect to a host CIC server, you can also do this procedure as a troubleshooting step to rule out FQDN.

IC Business Manager Applications

The IC Business Manager Applications installation program installs IC Business Manager and Interaction Fax Cover Page Editor on Windows 7 supervisor workstations. (IC Business Manager Applications are not supported on Windows XP.)

IC Business Manager Applications requirements

- Ensure that you fulfilled the CIC 4.0 client workstation software requirements as described in Workstation Migration Planning.
- Ensure that the person installing IC Business Manager Applications has administrative permissions on the local computer and other permissions.
- Close Microsoft Outlook and any other applications running on the workstation and turn off virus scanning.

Upgrade IC Business Manager Applications

Upgrading IC Business Manager Applications is similar to upgrading IC User Applications. Follow the instructions in Upgrade IC User Applications with the following specifics for IC Business Manager Applications:

- On the client workstation, select **Start.** In **Search programs and files**, type `\\`*servername*`\CIC_BusinessManagerApps`, where *servername* is the CIC 4.0 server name. Click `Setup.exe` to launch the IC Business Manager Applications install.
- On the **Custom Setup** page, all applications are selected by default. Clear any applications that you don't want to install.
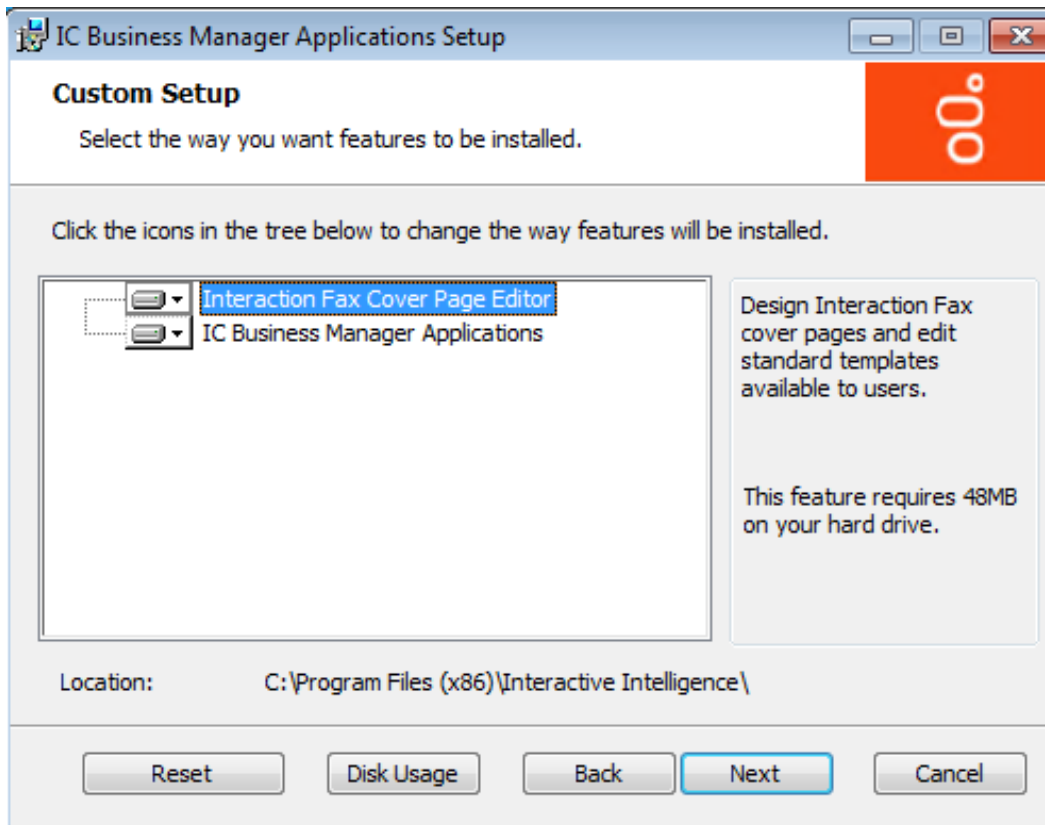
> **Note:** CIC 4.0 includes Interaction Supervisor in IC Business Manager Applications.

Install Interactive Update Client (IC Business Manager Applications)

If you haven't installed Interactive Update Client on the workstation where you have IC Business Manager Applications installed, install it now. For more information, see Upgrade Interactive Update Client.

Verify FQDN resolution (IC Business Manager Applications)

After installing the IC Business Manager Applications, follow the instructions in Verify FQDN resolution (IC User Applications).

IC Server Manager Applications

The IC Server Manager Applications installation program installs IC Server Manager, Interaction Administrator, Interaction Attendant, Interaction Designer, IC System Manager, Interaction Host Recorder Client, and Interaction SOAP Tracer administrator applications on Windows 7 workstations. (IC Server Manager Applications are not supported on Windows XP.)

IC Server Manager Applications requirements

- Ensure that you fulfilled the CIC 4.0 client workstation software requirements as described in Workstation Migration Planning.
- Ensure that the person installing IC Server Manager Applications has administrative permissions on the local computer and other permissions.
- Close Microsoft Outlook and any other applications running on the workstation and turn off virus scanning.

Upgrade IC Server Manager Applications

Upgrading IC Server Manager Applications is similar to upgrading IC User Applications. Follow the instructions in Upgrade IC User Applications with the following specifics for IC Server Manager Applications:

- On the client workstation, select **Start.** In **Search programs and files**, type `\\`*servername*`\CIC_ServerManagerApps`, where *servername* is the CIC 4.0 server name. Click `Setup.exe` to start the IC Server Manager Applications install.
- On the **Custom Setup** page, all applications are selected by default. Clear any applications that you don't want to install.
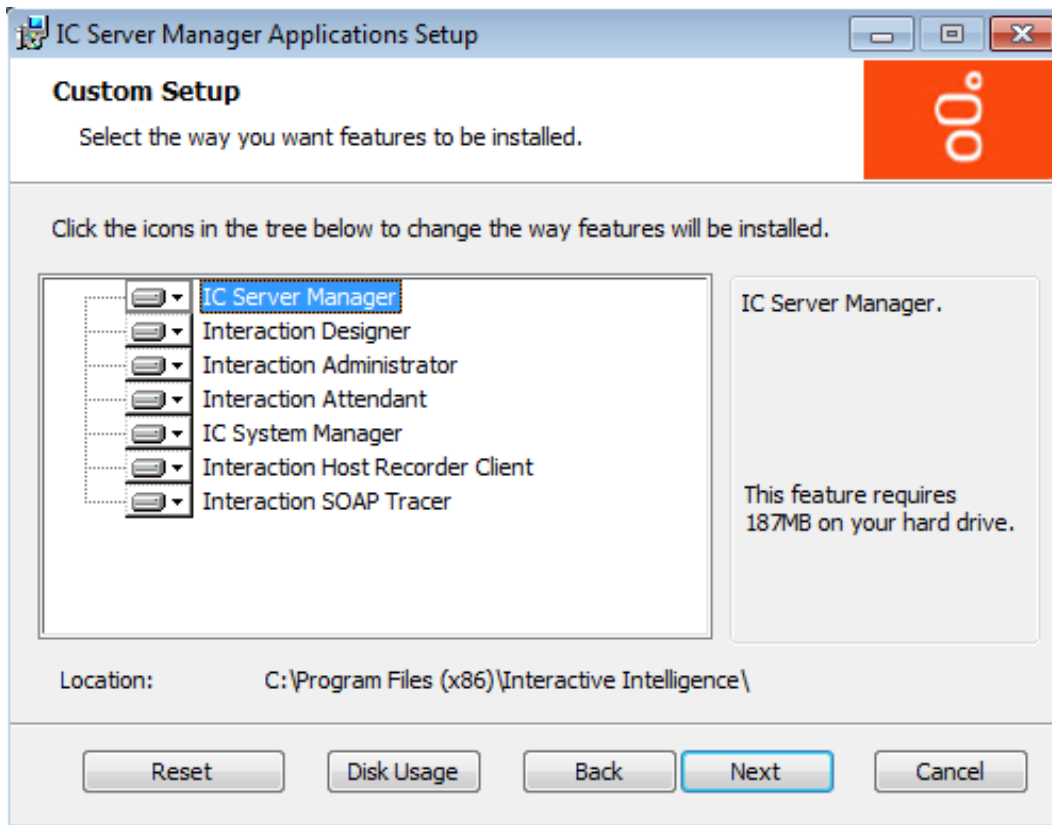
Install Interactive Update Client (IC Server Manager Applications)

If you haven't installed Interactive Update Client on the workstation where you have IC Server Manager Applications installed, install it now. For more information, see Upgrade Interactive Update Client.

Verify FQDN resolution (IC Server Manager Applications)

After installing the IC Server Manager Applications, follow the instructions in Verify FQDN resolution (IC User Applications).

Appendixes

Appendix A: Guidelines for Creating Your Migration Environment

After you review the migration tasks described in this guide, consider these guidelines for creating a migration environment for your own implementation. The guidelines are based on pre-release testing of the CIC 2.4/3.0 to CIC 4.0 migration package at various beta sites.

These are guidelines, not requirements. Most importantly, the guidelines provide reasonable fall-back strategies for various stages of the migration process.

Development environment

Genesys recommends that your CIC 2.4/3.0 to CIC 2015 R1 or later migration environment include a development environment for testing system functionality as you complete the migration tasks.

A proper development environment should mirror the production environment's licensing, installation, and configuration. At a minimum, your development environment should have a CIC server, an Interaction Media server, a database, and some phones. If your CIC implementation currently includes off-server Session Manager, Interaction Recorder Extreme Query Server, and/or other additional servers, consider including them in your development environment also.

Virtualized development environment recommended

Genesys recommends that you use virtual computers in your development environment, regardless of whether you intend to use them in your production environment,

Each stage of the migration process depends on the completion and verification of the previous stages. Create the first base snapshot when you first install CIC 2015 R1 or later. Create more snapshots as you verify each stage of the migration.

As long as you maintain stable and tested base images of your development computers, you can revert back as needed when encountering issues.

> **Note:** The migration tools have no *rollback* functionality. A virtualized development environment and computer imaging is the best way to avoid wasted efforts reinstalling and reconfiguring servers after encountering errors.

Development database

The CIC database schema has undergone dramatic changes in CIC 4.0. For this reason, it requires its own migration process from the existing database to a new, empty CIC 2015 R1 or later database.

Genesys recommends following these guidelines for the development database migration. As stated previously, take snapshots of the development database as you progress.

- **Prepare for and migrate the database using the CIC Database Migration Assistant** as described in this guide. Plan for enough disk space to hold all the data to migrate. As various table groups migrate, errors can arise because of inconsistent or missing source data. Correct these issues in the source data before you complete the database migration. Expect to run the CIC Database Migration Assistant multiple times as issues arise. CIC Database Migration Assistant can recover from errors in previous migration attempts. However, in extreme circumstances you might need to revert the database and restart the migration.
- Once the source data migration completes successfully, **review all reporting data to ensure the accuracy of the migrated data**. All the views that support CIC 3.0 reports carried forward to CIC 2015 R1 or later, albeit with different underlying queries. This action allows for a side-by-side audit of the two datasets. Check the data for completeness and correctness. If you encounter issues, you might need to revisit the migration entirely. Once you verify all the data on the migrated development database, back it up for future use as a restore point.
- Once you verify all the standard reports, **test any custom reports or other custom features that use the database**. You might need to create custom tables and query the data manually from the original database using the link that the migration process created. You might need to redevelop custom reports or extensions that interact directly with the database or call stored procedures that are part of the CIC schema.

Development CIC server

Genesys recommends several development/testing tasks beyond the import of configuration data from the existing CIC server. Interaction Migrator pulls configuration from Directory Services, and resource files and handlers. It is necessary to test all these things in the 4.0 environment.

Genesys recommends following these guidelines for the development CIC server migration. Take snapshots of the development CIC server as you progress.

- **Prepare for and import the CIC configuration data from the existing CIC server using Interaction Migrator** as described in this guide. Interaction Migrator imports all system settings, adds users, workgroups, roles, lines, dial plans, attendant profiles, and others. The Interaction Migrator import also converts and adds audio resource files, such as prompts. There is an option to import custom handlers at this time also. After the import, complete an audit of the system configuration in Interaction Administrator against the existing source server.
- Once you are satisfied that the settings on the development CIC server are correct, **install a test client workstation and complete some basic interaction testing**. It is helpful to have a test number that you can point to the server for this testing. If you use Exchange-based messaging, disable those workgroups or mailboxes so as not to queue emails to the development CIC server. This represents the best point to take a snapshot of the development CIC server. If you cannot fix any of the issues that you find with simple configuration changes, you might need to revert to the pre-import image of the server, and re-evaluate the export.
- Once the development CIC server is functional, **continue testing and correcting issues**. At this point, it is unlikely for a change to the export file to yield different results. Take careful notes about changes needed post-migration once you migrate to the production CIC server. Following are items to consider. As you progress through this list, take snapshots of the development CIC server as needed.
  - **Prompts** - Are all prompts in place and playable? The prompts convert to a new codec, if necessary, during import. Check for issues and consider recopying prompt files, if necessary.
  - **Attendant Profiles** - Are all profiles present and operable? If not, correct profiles and steps to move forward.
  - **Dial Plans** - Use the dial plan simulator to verify that dialing patterns use the proper lines as configured.
  - **Permissions** - Permissions are more granular in CIC 2015 R1 or later and the interface is quite different. Review permissions for users, groups, and roles against those on the existing source server and requirements for site security. Change the settings as necessary.
  - **Handlers** - Verify that all base handlers copied over correctly, and custom handlers if you selected the option to import them. Copy files over manually as needed.
  - **Certificates** - Check for valid certificates to remote subsystems, and run GenSSLCerts as necessary to correct them.
  - **Add On Applications** - Interaction Recorder is a very complex migration. Review the migrated recorder configuration and change the policies as needed. You might need to check other add-on applications, depending on what you installed.
  - **Reports** - Audit the CIC reports to ensure that proper historical data is in place. If any custom reports reference CIC tables directly, rework them to fit the new schema.
  - **Custom applications** - Test custom applications and extensions to ensure compatibility with the new environment.

Other servers in the development environment

Replicate other servers that exist in your production environment to the development environment. Install off-server Session Manager, Interaction Remote Content Servers, and ASR servers as needed and verify that each of these components is functional. As you wrap up this stage, you should have a replica of your existing production environment with CIC 2015 R1 or later components. Test as necessary, and take snapshots as needed.

Migrating to the production environment

The ideal migration to the production environment is to move from the development environment that you just verified in the following sequence. This sequence provides the safest possible transition path. Any issues encountered during the migration are accounted for in the development environment.

- **Create a new CIC 2015 R1 or later database for production and run the database migration from the source database**. This step ensures that the data moved is up to date with recent activity on the server. Most issues encountered during the development phase of the migration relate to problems in the source data. Resolved these issues at this point to allow a clean database migration to the production database.
- **Use Interaction Migrator to take a complete export of the development CIC server**. On the production system, complete a restore operation using the exported development CIC server data file.
- To ensure that user configuration is up to date, **take a new export from the existing source server of the user, workgroup, and role data** so that the production system is as current as possible for this data.
- **Import this second configuration file onto the production server** and test as necessary, correcting issues as they arise.

When installing CIC 2015 R1 or later client applications for end users, consider keeping some CIC 3.0 workstations available in case issues arise that you cannot correct immediately. Also, consider installing Interaction Web Client in the CIC 3.0 environment to give users a fall back as they cannot connect to the old production server once their Interaction Client is updated to CIC 2015 R1 or later.

Appendix B: Interaction Recorder Post-Migration Results

After you review the migration tasks described in this guide, and the steps required to migrate Interaction Recorder configuration data, consider the post-migration effects on Interaction Recorder. These results provide you with important information for evaluating and adapting to your Interaction Recorder configuration environment after migration.

CIC 3.0 to CIC 2015 R1 or later Interaction Recorder conversion results in Interaction Administrator

This section describes Interaction Recorder results in Interaction Administrator, and Interaction Recorder Policy Editor, after migrating CIC 3.0 to CIC 2015 R1 or later.

Migrating from CIC 3.0 to CIC 2015 R1 or later creates changes to Interaction Recorder data purging, selection results, category and categorization rules, questionnaires, archives, and Interaction Recorder licensing. As a best practice, Genesys recommends that you familiarize yourself with these changes as you work with Interaction Recorder post-migration.

Interaction Recorder base configurations

Interaction Recorder configurations including Recording Generation Settings, Data purging Settings, Processing Settings, Custom Attributes, Automated Archiving settings, and the master key migrate when you export the Interaction Recorder node using Interaction Migrator.

Data purging

If you enabled **data purging** in CIC 3.0, the migration creates a Retention policy for each category and subcategory. If you enabled **screen recording purging** and didn't select **Same as parent recording**, the migration creates a Retention policy to purge screen recordings.

Selection rules

Selection rules in CIC 3.0 convert to Initiation policies in CIC 2015 R1 or later. If a selection rule isn't associated to a user, workgroup, or role, the migration doesn't create an Initiation policy for that rule.

Category

The migration creates a Retention policy in CIC 2015 R1 or later for the default Category in CIC 3.0. For each root Category, the migration creates a View and an Administrator Security policy. If a Category doesn't have users, workgroups, or roles that can view or administer the Category, the migration doesn't create a Security policy for that Category.

Categorization rules

Categorization rules in CIC 3.0 convert to Retention policies in CIC 2015 R1 or later. If a categorization rule contains a condition not supported in CIC 2015 R1 or later, the migration doesn't create a Retention policy for that rule.

Questionnaires

Interaction Recorder questionnaires and completed score cards are in the database, and move to the 4.0 database as part of the Recorder table group migration. Questionnaires in Interaction Administrator in CIC 3.0 are now in IC Business Manager in CIC 2015 R1 or later.

Archives

In CIC 2015 R1 or later, archiving occurs by setting up retention policies to move recordings to an alternate storage location after a specified amount of time. The migration process creates retention policies that match the category-driven storage in CIC 2.4 to CIC 3.0. Once the migration is complete, configure storage policies manually to take effect after the main retention policy expires.

Recording attributes

Custom Recording Attributes migrate from the 3.0 Database to the 4.0 Database. All migrated recordings contain other custom attributes.

Recorder Master Key

Interaction Recorder has a built-in Master Key file that allows Interaction Recorder to encrypt recordings when you didn't configure a Master Key file. You can also choose to create a more secure, custom-generated Master Key file.

A Master Key securely protects recording keys, which encrypt and decrypt recorded media files. For more security, a Master Key encrypts each recording key. Recording keys generate when creating the media file, and store in the header of each media file. The recording key encrypts and decrypts the recorded media stored in the file.

Interaction Recorder Master Keys in CIC 3.0 convert to Interaction Recorder Master Keys in CIC 2015 R1 or later.

Stored recordings and the recordings storage path

If you store Interaction Media Server 3.0 recordings locally on the Media Server 3.0, you can update the recordings storage path in Interaction Recorder Policy Editor. For more information, see Migrate Interaction Media Server.

Licensing

In CIC 3.0, the only Interaction Recorder licenses were **Interaction Recorder Access** and **Interaction Recorder Extreme Query**. CIC 2015 R1 or later added two new licenses: **Interaction Recorder Client Access** and **Interaction Recorder Quality Monitoring**.

When you migrate users to CIC 2015 R1 or later, they cannot run the Interaction Recorder module in IC Business Manager without the Interaction Recorder Client Access license. Since this license is new in CIC 4.0, assign the license to the appropriate users after migration. For more information, see the *CIC Licensing Technical Reference* in the PureConnect Documentation Library.

Also, when you migrate users to CIC 2015 R1 or later, Interaction Recorder continues to apply the CIC 3.0 Interaction Recorder Access license for each user or station to record. For information about licensing recordings, see the *Interaction Recorder and Interaction Quality Manager Technical Reference* in the PureConnect Documentation Library.

> **Note:** If the user or station doesn't have proper licensing for Interaction Recorder, recordings remain encumbered. Encumbered recordings display in a search result in the Interaction Recorder Client search results view when using the "Recording is Encumbered" search attribute. You cannot play back encumbered recordings, and it requires a valid unlock code to unencumber the encumbered recordings on the server.

Interaction Screen Recorder capabilities and settings

Interaction Screen Recorder adds screen recording capability, which assists contact center managers and supervisors in improving their contact center's productivity and assessing agents' skills. CIC 2015 R1 or later does not require a separate Interaction Screen Recorder Server, as it does with CIC 3.0. Interaction Screen Recorder settings in CIC 3.0 convert to Interaction Screen Recorder settings in CIC 2015 R1 or later 0.

Interaction Recorder Remote Content Service settings

Interaction Recorder Remote Content Service settings in CIC 3.0 convert to Interaction Recorder Remote Content Service settings in CIC 2015 R1 or later. Interaction Recorder Remote Content Service facilitates the retrieval and storage of both audio and screen recordings in your CIC environment. Interaction Recorder Remote Content Service in CIC 2015 R1 or later replaces Interaction Screen Recorder Capture Server in CIC 3.0. The CIC 2015 R1 or later environment requires a fresh install of the Interaction Recorder Remote Content Service.

For licensing, requirements, and installation and configuration instructions, see the *Interaction Recorder Remote Content Service Installation and Configuration Guide* in the PureConnect Documentation Library.

Interaction recordings storage after database migration

Interaction recordings don't move during migration, only the path to the recordings migrate. If recordings are on the CIC server rather than on a network share or SAN, do one of the following manual steps so that Interaction Recorder can access the recordings:

- Create the same path on the CIC 2015 R1 or later server that you used on the CIC 3.0 server and copy the files to the CIC 2015 R1 or later server. Recording paths that contain a drive letter require these steps.
- Create a path on a network share, copy the files to that path, and then change the paths in the Interaction Recorder database to point to the new share.

After completing one of the options, create a Retention Policy with a valid storage location and reapply the Storage Location Retention policy. When the system reapplies the policy, it transfers the existing recordings to the new storage location, since the existing recordings match the location specified in the new storage policy. For more information, see the *Interaction Recorder* documentation in the PureConnect Documentation Library.

Interaction Recorder audit entries

If you select the Interaction Recorder group and specify a date range for migration, the date range governs what set of recordings migrate. Only recordings created within the date range migrate. However, since it is proper that all recording audit entries migrate with a recording, it is possible and correct for audit entries with dates outside the date range to migrate.

For example, if there are 12 recordings in a database, and each recorded on the first of the month for all 12 months of 2010, a migration over the range of April 15, 2010 through September 15, 2010 migrates six recordings (May 1, 2010, June 1, 2010, July 1, 2010, August 1, 2010, and September 1, 2010). If each of those six recordings played on January 1, 2012, the six recordings that migrated include the playback audit entries made on January 1, 2012, even though January 1, 2012 is outside the migration date range.

Interaction Recorder client searches

Interaction Recorder searches created in IC Business Manager migrate to the 2015 R1 or later database; however, Interaction Recorder client searches don't migrate. Since CIC 2.4 does not have IC Business Manager and only uses Interaction Recorder client searching, no CIC 2.4 Interaction Recorder searches migrate. If you are migrating from CIC 2.4 to CIC 2015 R1 or later, re-implement your searches in CIC 2015 R1 or later.

Interaction Recorder Extreme Query Server

The Extreme Query Server stores information about millions of call recordings for quick retrieval. The CIC 2015 R1 or later environment requires a fresh install of the Interaction Recorder Extreme Query Server.

For licensing, requirements, and installation and configuration instructions, see the *Interaction Recorder Extreme Query Installation and Configuration Guide* in the PureConnect Documentation Library.

Appendix C: Oracle Tablespaces

For Oracle databases, CIC Database Migration Assistant uses the following tablespaces:

- **ININ data/index tablespaces**: The tablespaces where database objects for the `ININ_MIGRATION` schema reside.
- **Target data/index tablespaces**: The tablespaces where CIC 4.0 data and database objects (tables, indexes, stored procedures) reside.

The data and index tablespaces lay out logical storage locations, which tie to physical storage locations by way of the Oracle tablespace configuration. Table data reside in the data tablespaces, and index data reside in the index tablespaces. The system uses CIC 2015 R1 or later data/index tablespaces for data that are specific to the 2015 R1 or later database that you are migrating into. The ININ data/index tablespaces contain information for all database migrations, not specific to any 2015 R1 or later schema. While the schema name (`ININ_MIGRATION`) does logically separate the migration history data from other CIC 2015 R1 or later schemas, using separate ININ data and index tablespaces allows you to specify separate storage locations. The separate storage locations allow you to take one CIC 2015 R1 or later schema and its attendant tablespaces offline without disturbing the `ININ_MIGRATION` historical migration information.

The ININ data/index tablespaces can be the same as the CIC 2015 R1 or later data/index tablespaces, but Genesys recommends that they be different. The data stored in the ININ data/index tablespaces are migration progress log entries for the Interaction Recorder and Customer Satisfaction Survey migrations, and some table-specific migration history data.

The tables and indexes that the migration process creates reside in the ININ data/index tablespaces and contain data related only to migrating data into specific schemas that use those tablespaces.

Typically, Genesys recommends that any single CIC 2015 R1 or later schema have its own data and index tablespace so that disk space is managed independently for each 2015 R1 or later schema. Migrating CIC 3.0 data into a CIC 2015 R1 or later schema creates tables that do key mapping/translation between 3.0 primary/foreign keys and 4.0 primary/foreign keys. The key translation tables are in the same tablespace because they are related directly to the 2015 R1 or later data.

The following example illustrates why it is a good idea to separate the CIC 2015 R1 or later tablespaces from the ININ tablespaces. Let's say a single Oracle instance hosts 3 different CIC 4.0 schemas, one for a different CIC server. One schema is for production, another for special projects, and a third for testing out CIC 2015 R1 or later. Let's say also that each of those schemas has their own data and index tablespaces. At one point, you migrate some data from a CIC 3.0 database to the 2015 R1 or later test schema for evaluation purposes. Once you complete testing, the test schema and tablespaces are wiped clean or deleted. The production system goes live, and data migrates from a CIC 3.0 schema to the 2015 R1 or later production schema. In that scenario, if the ININ data/index tablespaces were the same ones as the 2015 R1 or later test schema's tablespaces, migration history and logging is lost. If the ININ data/index tablespaces were not any of the 2015 R1 or later tablespaces (test/evaluation, special projects, production), that history and log is not lost regardless of what happens to the other schemas and their tablespaces.

Losing the data in the ININ tablespaces does not prevent any future migrations from completing successfully. So, it is not required for the ININ tablespaces to be separate and protected.

Appendix D: Interaction Conference Migration

Existing Interaction Conference 3.0 systems must migrate to Interaction Conference 2015 R1 or later as part of the CIC 3.0 to 2015 R1 or later migration process.

Interaction Conference architecture

Interaction Conference is a premise-based audio conferencing application that allows your enterprise to host scheduled conference calls for internal and external use.

The Interaction Conference system components relevant to the CIC migration process are:

- **CIC Server**. The CIC server uses an Interaction Conference subsystem to host and manage the conference calls.
- **Database Server**. The repository for conference scheduling and historical data and also the CIC Report Database where all CIC Servers record call data.
- **Client Workstations**. Interaction Conference provides the following client workstation plug-ins:
  - **(Required)** `MSOutlook_IConferencePlugins.msi`, a required client plug-in for Microsoft Outlook 2010 computers that allows users to schedule conferences from an Outlook Appointment Request. This plug-in installs in the `CIC_InteractionConferenceMSOutlookPlugin` shared directory on the CIC server.
  - **(Optional)** `ICServerManagerApps_IConferencePlugins.msi`, an optional client plug-in that users can run on workstations that have Interaction Administrator installed and where administrators configure Interaction Conference.

For more information about configuring Interaction Conference, see the _Interaction Conference Administrator's Guide_ in PureConnect Documentation Library.

Interaction Conference migration requirements

This section describes the minimum requirements for Interaction Conference 3.0 to Interaction Conference 2015 R1 or later migrations.

Interaction Conference 3.0 server

- CIC 3.0 SU 14 or later
- Interaction Conference 3.0 SU 3

Interaction Conference 2015 R1 or later server

- CIC 2015 R1 or later or later
- Interaction Conference 2015 R1 or later

Migrate Interaction Conference

Migrate Interaction Conference as part of your CIC migration.

Run Interaction Migrator to export Interaction Conference 3.0 configuration data

Interaction Migrator exports Interaction Conference 3.0 configuration data as part of the CIC 2.4/3.0 export process, described in Export CIC 2.4/3.0 Configuration Data.

> **Note:** On the **Data Component Selection** page, ensure that **Select All** is selected (default) so that Interaction Migrator exports all Interaction Conference configuration data.

Install Interaction Conference 2015 R1 or later

Install Interaction Conference 2015 R1 or later when you install the CIC 4.0 server. Setting up and installing the CIC 2015 R1 or later Server is described in Prepare the CIC 2015 R1 or Later Server Environment.

For more information about Interaction Conference 2015 R1 or later installation procedures, see "Installation Tasks" in the *Interaction Conference Administrator's Guide* in the PureConnect Documentation Library.

Run CIC Database Migration Assistant to migrate the Interaction Conference database

CIC Database Migration Assistant automatically migrates the Interaction Conference database as part of the CIC database migration, or as a standalone application. Depending on your company's requirements, you can migrate specific sections of the database and CIC over migrating as a whole.

CIC Database Migration Assistant migrates all Interaction Conference data—it does not filter data by parameters that you set on the **Date Range** page. For example, if an administrator migrates a database that includes call history and Interaction Conference, and then specifies a date range of one month, CIC Database Migration Assistant migrates one month of call history, but all Interaction Conference tables.

Before you run CIC Database Assistant, ensure that you complete all installation and configuration tasks for the Interaction Conference 4.0 server as described in the "Installation Tasks" section of the *Interaction Conference Administrator's Guide* in the PureConnect Documentation Library.

Change the Interaction Conference site ID

After you migrate the Interaction Conference 3.0 database, to ensure that the migration carries all historical Interaction Conference data to the new system, change the site ID in Interaction Conference 2015 R1 or later to match the site ID assigned in Interaction Conference 3.0.

To change the site ID for a SQL database:

Run the `IConSiteID.SQL` script on the Interaction Conference 2015 R1 or later database with the following syntax:

```
sqlcmd -S ServerName -d DBName -U UserName -P password -I "C:\Program Files
(x86)\Interactive Intelligence\CIC Database Migration
Assistant\Scripts\sqlserver\IConSiteId.sql" -v NewSiteId=<new site id value> OldSiteId=<old
site id value>
```

To change the site ID for an Oracle database:

Run the `IConSiteID.SQL` script on the Interaction Conference 2015 R1 or later database with the following syntax:

```
sqlplus [Owner]/[Password]@hostname:port/service @"C:\Program Files\Interactive
Intelligence\CIC Database Migration Assistant\Scripts\oracle\IConSiteId.sql" [Owner_Name]
[NewSiteID] [OldSiteID]
```

Run Interaction Migrator to import the Interaction Conference configuration data

Interaction Migrator imports Interaction Conference 3.0 configuration data as part of the CIC 2.4/3.0 export process, described in Import CIC 2.4/3.0 Configuration Data.

> **Note:** After Interaction Migrator loads the Interaction Conference server 3.0 configuration data file and extracts the data, on the **Import Items** page, select all components to ensure that Interaction Migrator imports all Interaction Conference configuration data.

Appendix E: Interaction Director Migration

> **Note:** *Support for Interaction Director 2015 R1 or later is not currently available. Genesys updated this section.*

Existing Interaction Director 2.4 systems must migrate to Interaction Director 4.0 as part of the CIC 2.4/3.0 to 4.0 migration process.

Interaction Director client/server architecture

Interaction Director uses client/server architecture, meaning that software deploys across servers that collectively comprise a system. Two types of servers comprise Interaction Director:

- **Director server**: A stand-alone computer on which Interaction Director server software runs. Migrate the Director server *after* you migrate all monitored servers.
- **Monitored server**: Two or more CIC servers that Director server manages and that you configured to know about. Each monitored server provides information to the Director Server that allows it to route calls most efficiently. Migrate all monitored servers *before* you migrate the Director server.

For more information about Interaction Director configuration, see the *Director Monitored Server Installation and Configuration Guide* and the *Interaction Director Installation and Configuration Guide*.

Interaction Director migration

You must migrate all Interaction Director monitored servers before you migrate the Interaction Director server.

The current release of the CIC 2.4/3.0 to CIC 4.0 migration package supports only one-to-one Director-monitored server migrations. Multiple Director-monitored server environments must create a 4.0 Director-monitored server for each existing Director-monitored server and migrate the configuration data on a one-to-one basis.

Interaction Director migration requirements

This section describes the minimum requirements for Interaction Director 2.4 to 4.0 migrations.

Interaction Director 2.4 servers

- Interaction Director 2.4 SU 3 or later
- CIC 2.4 SU 35 or CIC 3.0 SU 13 or later
- SQL Client (Oracle or Microsoft), installed before Director Server

Note: Microsoft's SQL Client (`osql.exe`) installs with Microsoft SQL server. Oracle's script execution engine (`sqlplus.exe`) installs with the Oracle Client install. For version-specific details, see the Oracle server documentation.

Interaction Director 4.0 servers

- Interaction Director 4.0 GA or later
- CIC 4.0 SU 3 or later
- SQL Client (Oracle or Microsoft), installed before Director Server

Note: Microsoft's SQL Client (`osql.exe`) installs with Microsoft SQL server. Oracle's script execution engine (`sqlplus.exe`) installs with the Oracle Client install. For version-specific details, see the Oracle server documentation.

Migrate Interaction Director monitored servers

Interaction Migrator exports and imports Interaction Director Monitored server configuration data along with the CIC configuration.

Run Interaction Migrator to migrate the Interaction Director configuration on each monitored server in your implementation as part of the CIC 2.4/3.0 to CIC 4.0 migration process.

Migrate the Director server

You maintain the Director server configuration within Interaction Director-specific Interaction Administrator containers. The Director server also stores detailed interaction data within a database.

Migrate the Director server after you complete the CIC 2.4/3.0 to CIC 4.0 migration, which includes Interaction Director Monitored server migration.

Complete the steps in this section to migrate the Interaction Director server.

Install Interaction Migrator 4.0 on the Interaction Director 2.4 server

Install Interaction Migrator 4.0 on the Director 2.4 server as described in Interaction Migrator Installation. Ensure that you install the latest version of Interaction Migrator. For more information, see the PureConnect Customer Care site at https://my.inin.com/support/products/ic40/Pages/Migrations.aspx.

Install the 4.0 Interaction Director server

Install the Interaction Director 4.0 server as described in the *Interaction Director Installation and Configuration Guide* in the PureConnect Documentation Library.

Run Interaction Migrator to export Interaction Director 2.4 configuration data

Run Interaction Migrator on the Director 2.4 server to export the Interaction Director configuration data using the same process described in Export CIC 2.4/3.0 Configuration Data.

Note: On the **Data Component Selection** page, ensure that **Select All** is selected (default) so that Interaction Migrator exports all Director configuration data.

Run CIC Database Migration Assistant to migrate the Interaction Director database

From the CIC Database client computer, run CIC Database Migration Assistant to migrate the Interaction Director database.

> **Note:** To ensure that the migration carries all historical Director data to the new system:
> - On the **Database Server Credentials** page, select the Director Server 2.4 and Director Server 4.0 databases.
> - On the **Select Table Groups to Migrate** page, select the **Director** table group.

Run Interaction Migrator to import the Interaction Director configuration data

Run Interaction Migrator on the Director 4.0 server to export the Interaction Director configuration data using the same process described in Import CIC 2.4/3.0 Configuration Data.

> **Note:** After Interaction Migrator loads the Director Server 2.4 configuration data file and extracts the data, on the **Import Items** page, select all components to ensure that Interaction Migrator imports all Director configuration data.

Change Log

The following changes have been made to this document since it was first distributed.

Date	Change
12-December-2012	In Appendix A: "Guidelines for Creating Your Migration Environment," updated the first bullet point in section "Migrating to the production environment" to clarify that you should create a new CIC 4.0 database for production and perform the database migration from the source (not the development) database.
13-March-2013	- In "Prepare the CIC 4.0 Server Environment," added a subsection to "Database server requirements" that addresses SQL Server 2000 to SQL Server 2012 upgrades. - In "Migration Planning," in "CIC database migration scenarios," updated the "Many-to-one migration" description to include migrating multiple databases that contain data with identical site IDs. - In "Introduction," updated the Interactive Update versions in "Minimum requirements for migrations" to Interactive Update 1.0 SU 11 and Interactive Update 2.0 SU 3. - In "Migrate CIC 3.0 Workstations Using Interactive Update" updated the Interactive Update versions in "Required CIC and Interactive Update versions" to Interactive Update 1.0 SU 11 and Interactive Update 2.0 SU 3 and updated the screen shots in the upgrade procedures for these versions. - In "Migrate CIC 3.0 Workstations Using Setup.exe," reversed the "Upgrade Interactive Update" and "Upgrade IC User Applications" procedures and updated the "Upgrade Interactive Update" procedure screenshots for Interactive Update 2.0 SU 3.
10-May-2013	- In "Prepare for CIC Database Migration", updated the procedures in "Upgrade the CIC 2.4/3.0 and CIC 4.0 database schema" for the changes made to CIC Database Migration tools and scripts to ensure a successful migration to the database schema in CIC 4.0 SU 3 and later. "Prepare for CIC Database Migration", in "Prepare the CIC 3.0 and CIC 4.0 databases," added new procedure "Change the remote query timeout" to "SQL Server pre-migration procedures."
18-June-2013	- In "Migrate the CIC 3.0 Database", in the "Migrate the 3.0 Database" procedure, updated step 12 with instructions for selecting a time zone to process UTC fields that appear in some 4.0 table groups, added a Windows support site link for users in specific time zones, added default Start Date and End Date, and noted that if the Site ID field is blank, the system migrates all records. - In "Prepare for CIC Database Migration, "Manually run the individual database schema upgrade scripts", in clarified that in the Oracle syntax to run from the command line, <dba user> is the owner of the database and is CIC_ADMIN by default. - In "Prepare for CIC Database Migration, "Manually run the individual database schema upgrade scripts", updated the order of the manual script execution in the following sections: - Upgrade the CIC 2.4/3.0 database schema to the most recent CIC 3.0 database schema (SQL Server) - Upgrade the CIC 2.4/3.0 database schema to the most recent CIC 3.0 database schema (Oracle) - Upgrade the CIC 4.0 database schema to the most recent CIC 4.0 database schema (SQL Server) - Upgrade the CIC 4.0 database schema to the most recent CIC 4.0 database schema (Oracle) - In "Prepare for CIC Database Migration, "Manually run the

individual database schema upgrade scripts", in the "Upgrade the CIC 4.0 database schema to the most recent CIC 4.0 database schema (Oracle)" section, updated notes for the SetUpMigratorUser.sql script that the user should ensure the <dba_user> is in the "sysdba" role, required to properly run the SetUpMigratorUser.sql script.

- In "Prepare for CIC Database Migration, "Prepare the CIC 3.0 and CIC 4.0 databases", combined content from the "Change restart table values" to the "Change commit frequency" section and removed the "Change duplicate entries value" and "Change restart table values" section. Resetting the value to avoid numerous entries in error tables due to duplicates is no longer necessary.

- In "Prepare for CIC Database Migration, "Upgrade the CIC 2.4/3.0 and CIC 4.0 database schema", in the "Use CIC Database Script Execution Tool to run the database schema upgrade scripts (SQL Server only)" section, updated step 7 to describe behavior when the CIC 3.0 database is SQL 2000 Server 32-bit and is accessed with SQL Server Authentication credentials lacking rights to create a stored procedure on the master database.

- In "Migrate the CIC 3.0 Database, in the "Migrate the CIC 3.0 Database" procedure, updated step 4 to clarify that the Start Date and End Date columns contain dates used to limit the database records migrated during the past migration utility execution, and updated step 12 to better define the Start and End Date fields.

- In Migrate the CIC 3.0 Database, in the "Incremental Migrations" section, deleted the second bullet point under Notes. All tables have unique indexes; the system excludes previously migrated data without causing error. The bullet point cautioning the user not to overlap date ranges to avoid duplicate data is no longer applicable.

- In Prepare for CIC Database Migration, "SQL Server pre-migration procedures", updated the Modify the recovery mode section to expand the note in step 1 describing how to delete Tracker data if data exists in the INTX_PARTICIPANT and INTXSEGMENT tables.

- In "Migrate the CIC 3.0 Database", "Migrate the CIC 3.0 Database section", added a note to step 10 describing how to delete Tracker data if data exists in the INTX_PARTICIPANT and INTXSEGMENT tables.

- In "Prepare for CIC Database Migration", "Upgrade the CIC 2.4/3.0 and CIC 4.0 database schema", in the following sections added correct syntax and special instructions for running Oracle scripts:
  - Upgrade the CIC 2.4/3.0 database schema to the most recent CIC 3.0 database schema (Oracle)
  - Upgrade the CIC 4.0 database schema to the most recent CIC 4.0 database schema (Oracle)

- Updated the introduction to "Prepare for CIC Database Migration" and "Migrate the CIC 3.0 Database with the statement that current version of CIC Database Migration Assistant does not contain updated Oracle tools and scripts for CIC 4.0 SU 3 and later.

02-July-2013	Updated supported Oracle versions and caveat about Oracle 11.2.0.3 client in "Prepare the CIC 4.0 Server Environment" in the "Database server requirements" section.

20-September-2013	- Made major organizational changes to this document to incorporate Interaction Dialer 2.4/3.0 to 4.0 migration information and procedures. Added three new chapters, which changed the chapter numbering: "Prepare the Interaction Dialer 4.0 Server Environment," "Prepare for Interaction Dialer Database Migration," and "Migrate the Interaction Dialer 2.4/3.0 Database." - Made updates throughout this document to reflect: - The current migration package tools require CIC 4.0 SU 3 and later. - The current migration package contains Oracle support for Interaction Database Migration Assistant for CIC 4.0 SU 3. - Added Appendix D: Interaction Conference Migration - Added Appendix E: Interaction Director Migration - In "Workstation Migration Planning", updated "CIC 4.0 client workstation software requirements" to include Windows 8 support, available in CIC 4.0 SU 3 and later. - Updated "Interaction Optimizer Considerations" sections in this document to reflect new behavior in CIC Database Migration Assistant for Interaction Optimizer data.
19-December-2013	- In "Prepare the CIC 4.0 Server Environment", updated "Database server requirements" for Microsoft SQL Server version. - In "Migrate CIC 3.0 Workstations Using Interactive Update", in "Create a 'migration' machine group", added note about Modify Group Members option in Interactive Update 1.0 SU 12 and later.
03-February-2014	In "Prepare for CIC Database Migration": - Updated "Upgrade the CIC 4.0 database schema to the most recent CIC 4.0 database schema (Oracle) to add Create_User_Role.sql." *"Updated all sections that describe running scripts manually that the scripts be run consecutively, not concurrently."*
10-April-2014	- In "Prepare the CIC 4.0 Server Environment," in "Database server requirements," added note and KB article reference about known issues with Oracle client 11.2.0.1.0. - In "Import CIC 2.4/3.0 Configuration Data," in "Run Interaction Migrator to import CIC 2.4/3.0 configuration data," added note about stopping CIC Service if running a Switchover pair.
28-April-2014	- Removed Migration Checklists from beginning of this document. A more comprehensive, separate Migration Checklists document is available in the Migration package on the Product Information site. Updated screenshot of Migration package in "Introduction." - Made additional minor edits.
06-October-2014	Updated documentation to reflect changes required in the transition from version 4.0 SU# to CIC 2015 R1, such as updates to product version numbers, system requirements, installation procedures, references to Interactive Intelligence Product Information site URLs, and copyright and trademark information.
15-January-2015	- In "Migrate CIC 3.0 Managed IP Phones", added section "Identify Imported Managed IP Phones". - In "Install CIC Database Migration Assistant", added section for "Oracle Client requirements". - In "Migrate the CIC 3.0 Database", added 4th bullet to "Additional notes" section in step 12 of "Migrate the CIC 3.0 database" procedure to run ICUserID Dedup script. - In "Prepare for CIC Database Migration", in the "Upgrade the CIC 4.0 database schema" section, corrected name of TrackerBuild.sql in list of scripts.

27-January-2015	• "Install CIC Database Migration Assistant", in the "Tracing" section, added note about drive space. • "Export CIC 2.4/3.0 Configuration Data", in the "To export CIC 2.4/3.0 configuration data" section, added bullet about IPA node is not checked by default. • "Import CIC 2.4/3.0 Configuration Data", in the "Before you run Interaction Migrator to import CIC 2.4/3.0 configuration data" section, added bullet about verifying the NIC. • "Prepare for CIC Database Migration" removed Delete_Dups_IVRInterval.sql, Delete_Nulls_UserObjectSecurity.sql, and Delete-Dups_UserObjectSecurity.sql scripts from list for SQL Server and Oracle. • "Migrate the CIC 3.0 Database", in the "Optimizer table group considerations" section, added 3rd bullet to indicate that data from CIC 3.0 cannot be merged into existing data. • "Workstation Migration Planning", in the "Custom client settings stored on the CIC server" section, updated the location of where the custom client settings are stored. • "Migrate the Interaction Dialer 2.4/3.0 Database", in the "Dialer database migration considerations" section, added bullet about deleting workflows that do not contain historical workflow tables to avoid an error. • "Migrate the CIC 3.0 Database", in the "To migrate the CIC 3.0 database" section, step 15, added note to indicate that files are zipped and encrypted after a user clicks finish.
28-January-2015	"Prepare for CIC Database migration", changed path names that included \ic30 to \source and \ic40 to \target.
29-January-2015	• "Introduction", in the "Migration package contents" section, updated to indicate new downloads page and use of Migration .iso. • "Install Interaction Migrator", in the "Interaction Migrator version information" section and the "Install Interaction Migrator" section, updated to indicate new downloads page and use of Migration .iso. • "Export CIC 2.4/3.0 Configuration Data", in the "If applicable, run the Interaction Recorder Migration Prep Utility" section, removed reference to CIC 2.4 and updated to indicate new downloads page and use of Migration .iso. • "Introduction", in the "CIC Database Migration Assistant Version information" section and the "Install CIC Database Migration Assistant" section, updated to indicate new downloads page and use of Migration .iso.
03-June-2015	• In "Install CIC Database Migration Assistant", in the "About the CIC Database Migration Assistant package" section, removed bullet about CIC Database Script Execution Tool. • In "Install CIC Database Migration Assistant", in the "Install CIC Database Migration Assistant" section, in step 8 removed two icons for script shortcuts for CIC Database Script Execution Tool for 3.0 and 4.0 SQL Scripts. • In "Prepare for CIC Database Migration", in the "Upgrade the CIC 2.4/3.0 and CIC 2015 R1 or later database schema" section, updated the two options for running the database schema upgrade scripts. • In "Prepare for CIC Database Migration", removed "Use CIC Database Script Execution Tool to run the database schema upgrade scripts (SQL Server only)" section. • In "Migrate the CIC 3.0 Database", in the "To migrate the CIC 3.0 database" section, added information about checking for compatibility of source and target database.

15-July-2015	• Replaced Interaction Client .NET Edition with Interaction Desktop. • In Appendix B: Interaction Recorder Migration, "Licensing" section, updated name of TR to I*nteraction Recorder and Interaction Quality Manager Technical Reference*. • In Workstation Migration Planning in the "Windows OS requirements" section, updated requirements for Windows 8 and 8.1 to include 32-bit. • Updated cover page and copyright page.
31-August-2015	• Migration Planning, in the "Interaction Dialer configuration and database migration summary" section, added information about server parameter and event log entry. • Migrate CIC 3.0 Managed IP Phones, in the "Create a DHCP custom option (recommended)" section, updated parameters in 2b.
01-September-2015	• Import CIC 2.4/3.0 Configuration Data, in the "Run Interaction Migrator to import CIC 2.4/3.0 configuration data" section, added note about conversion of client settings. • Workstation Migration Planning, in the "Custom client settings" section, updated note to refer to the Transition to Interaction Desktop Administrator's Guide.
11-September-2015	Prepare for CIC Database Migration, reorganized to create sections for Oracle and SQL Server.
16-October-2015	Updated requirements to indicate .NET Framework 4.5.2.
20-October-2015	Chapter 17: Migrate CIC 3.0 Workstations Using Interactive Update, updated for 2015 R1 or later.
11-January-2016	Migration Planning and Chapter, Prepare for CIC Database Migration, and Migrate the CIC 2.0 Database, updated to clarify Optimizer consideration. Updated copyright and trademark information.
15-February-2016	Migrate the CIC 3.0 Database, removed sentences suggesting that you run CIC database Migration Assistant before importing CIC configuration data.
10-March-2016	Updated requirements to include Windows 10 version 1511.
04-October-2016	Updated Install Interaction Migrator, Prepare the CIC 2016 R1 or later Server Environment, and Migrate Intea4rction Media Server 3.0 to explain the appropriate version of Interaction Migrator to download and install instead of always installing the "latest" version.
07-December-2016	Updated Prepare the CIC 2015 R1 or Later Server Environment, Database server requirements to include Microsoft SQL Server 2016.
11-July-2017	Updated Microsoft .NET Framework 4.5.2 requirement to Microsoft .NET Framework 4.5.2 or later.
18-October-2017	Rebranded to Genesys.
10-January-2018	Added "IP table names" section in chapter 12 to indicate that the Interaction Migrator import appends "_migrated" to the IP table names.
15-March-2018	Added link to "CIC 4.0 License Upgrade Guide" to the "Review the CIC 4.0 License Upgrade Guide" section..
28-March-2018	Updated document format.
14-June-2018	Added Microsoft .NET Framework 4.7 requirement for PureConnect 2018 R4 or later.

1-February-2019	Updated *"Create a UDL file for the new 2015 R1 or later database"* to indicate that the UDL file resides on the CCS server, not the CIC server.