



**PureConnect®**

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# Interaction Migrator

## Technical Reference

### Abstract

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

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

For copyright and trademark information, see [https://help.genesys.com/pureconnect/desktop/copyright\\_and\\_trademark\\_information.htm](https://help.genesys.com/pureconnect/desktop/copyright_and_trademark_information.htm).

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# Introduction to Interaction Migrator

Interaction Migrator is a version-independent utility that exports and imports configuration data related to the CIC server, Interaction Media Server, and other CIC components. You can also use Interaction Migrator for CIC server recovery and version control. Interaction Migrator **does not** support recovery on an Interaction Media Server.

**Important!**

Beginning with the 2020 R2 release of Interaction Migrator, Genesys no longer supports the automated migration of 3.0 and earlier versions using Interaction Migrator. Customers who want to upgrade a 3.0 system can use 2020 R2 as the target release for the migration process.

## Interaction Migrator Console

Interaction Migrator installs an MS-DOS Console version of Interaction Migrator, `ININ.Migrator.Console.exe`, in the same folder as Interaction Migrator. Interaction Migrator Console uses command-line switches to export and import the CIC server and Interaction Media Server configuration data. For more information, see [About Interaction Migrator Console](#).

*[Copyright and trademark](#)*

# Recovery and Version Control

Interaction Migrator supports recovery and version control for CIC 2015 R1 or later to CIC 2015 R1 or later.

For example, you can:

- Back up CIC configuration data for emergency recovery situations
- Back up selected CIC configuration data like Interaction Attendant profile data or handlers for version control purposes

Interaction Migrator **does not** support recovery on an Interaction Media Server.

# Interaction Migrator and Other PureConnect Products

Interaction Migrator updates data on CIC servers and Interaction Media Servers only. Do not attempt to export or import data to and from non-CIC servers or Interaction Media Servers with CIC product components or other PureConnect products installed.

For example:

- Off-server Session Manager
- Interaction Recorder Remote Content Server
- ASR server
- Database server
- Mail server
- Web server
- Directory server
- Interaction Dialer Central Campaign (CCS) Server

# Microsoft .NET Framework Requirements

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

- **PureConnect 2018 R4 or later and Interaction Media Server 2015 R1 or later** require Microsoft .NET Framework 4.7 or later and 3.5.1. For more information, see [CIC System Software Requirements](#).
- **CIC 2015 R1 or later and Interaction Media Server 2015 R1 or later** require Microsoft .NET Framework 4.5.2 or later and 3.5.1. For more information, see [CIC System Software Requirements](#).

# About Importing Configuration Data

When Interaction Migrator imports CIC or Interaction Media Server configuration data, it completes tasks for certain data components and copies the files as it does during the export.

## CIC Migration and Recovery Modes

Interaction Migrator does the following when importing data components in both Migration and Recovery modes:

- **Client Buttons** - Interaction Migrator copies the icon files to the resources directory and sets the registry entry Valid Icon to "Yes" so that Interaction Administrator knows that the file imported and resides in the resources folder.
- **Dial Plan Classifications** - Interaction Migrator checks the values in the configuration key under the Classifications value to see whether the value is there already. If the value is not there, Interaction Migrator creates it with the proper class name for the CIC release.
- **Reports** - Interaction Migrator verifies whether the reports are valid. If the .rpt file exists in the Report File Path on the server, Interaction Migrator assumes that the report is a **production report** and does not import the equivalent .rpt file from the CIC configuration data file. If the .rpt file *does not* exist in the Report File Path, Interaction Migrator assumes that the report is a **custom report**. Interaction Migrator retrieves the Report File Path value from the server parameter value in the Server Parameter container in Interaction Administrator. Typically, you set up this value during the CIC server installation.

## CIC Migration Mode Only

Interaction Migrator does the following when importing data components in Migration mode only:

- **Interaction Attendant profiles** - Interaction Migrator checks the Active Attendant configuration and overwrites that configuration with the newly imported Attendant configuration data.

**Note:** If the import results in errors when opening Interaction Attendant, address these errors manually in Interaction Attendant, post-migration.

- **Server Parameters** - Interaction Migrator adds the suffix "\_migrated" to the original server parameters before updating them. **Ensure that you complete the following steps after the import:**
  1. Review the values of each original and imported server parameter and decide which one you want to keep.
  2. Delete the server parameter that you want to discard.
  3. If you deleted the original, rename the "\_migrated" parameter to the original name.
  4. Manually rename any custom server parameters by removing the "\_migrated" after you determine whether you need them.
- **IP Tables** - Interaction Migrator appends "\_migrated" to the original IP table names before updating them.
- **Users** - Interaction Migrator adjusts the user's home site to the new value for the server on which Interaction Migrator is importing the data. Interaction Migrator also migrates the user status data to the new format, and moves that data to the Live Data registry key.

## Database Migration and Recovery

If you select the Data Sources component, Interaction Migrator exports and imports the Interaction Center database configuration settings. However, Interaction Migrator does *not* update the database on the database server or reconfigure ODBC settings. The steps to update the database server depend on your migration or recovery scenario.

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### Same version to same version database migration or recovery

For same version database migrations (for example, CIC 2015 R1 or later on one server to CIC 2015 R1 or later on a different server), **run IC Setup Assistant immediately following the Interaction Migrator import** to upgrade the database and reset the CIC Data Sources and ODBC objects. IC Setup Assistant overrides any changes Interaction Migrator made.



- Same version to same version database migrations apply to **CIC 2015 R1 or later to CIC 2015 R1 or later servers** only. The CIC server to which you import data must have a different name than the CIC server from which you export CIC configuration data.
- CIC Migrator only migrates custom Data Sources; it does not migrate default Data Sources.

During same version database recoveries, Interaction Migrator recovers both default and custom Data Sources.

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## Database recovery

There is no need to update the database or reconfigure ODBC settings in a recovery scenario.

## Language Packs

If you have CIC Language Packs installed on the "export" CIC server, Interaction Migrator imports any localized custom Interaction Attendant wave files, handlers, and prompts.

## 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 performs 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."

# Licensing

It is important to note that a **new or upgraded CIC server does not work correctly with a license file from an earlier CIC version**. For new and upgrade licensing instructions, see the **Activation File Management** tool, which replaced the License Management System beginning March 2018. Customers can access the tool on their [My Support Dashboard](#). Partners can access the tool on the [Partner portal](#). You must have the appropriate credentials to access these portals.

If you selected the Administrative data component, Interaction Migrator exports/imports the license allocation. However, **you might need to adjust license allocation** post-import as CIC licensing changes with each release.

# Telephony Configuration

After importing, redetect **the Telephony Resources** in Interaction Administrator.

If your telephony platform is Dialogic HMP, **there are differences in HMP licenses, depending on the HMP version**. Also note that adding/subtracting voice resources, IP resources, and fax resources can change the board and port configuration in Interaction Administrator.

**For SIP lines, verify that you set the network adapter correctly** for the new or upgraded CIC server in Interaction Administrator after importing. If it isn't correct, reset it and save the configuration.

Board and port configurations are different for each telephony environment. So, if you **plan to change the telephony platform** on a new CIC server, **re-create all lines, interfaces, and stations** in IC Setup Assistant, Interaction Administrator, or both. Do not export/import lines, stations, and interfaces with Interaction Migrator.

# Handlers

Interaction Migrator does not publish or manage custom handlers. Interaction Migrator places the handlers from the Interaction Migrator export into the designated extraction folder. Manually **publish and manage custom handlers post-import**.

The **IP\Handlers** check box ties to the **<Server Name>\IP** check box. When you clear the **IP\Handlers** check box, Interaction Migrator clears the **<Server Name>\IP** check box and makes it unavailable. When you select the **IP\Handlers** check box, Interaction Migrator selects the **<Server Name>\IP** check box and enables it.

Also note that CIC base handlers change substantially in each release. Before you export or import with Interaction Migrator, **inventory each modified base handler** and **modify and publish the base handlers** on the new CIC server **post-import**.

For the CIC release for detailed handler procedures, see the appropriate *Upgrade Guide*.

## Dial Plan

Interaction Migrator copies the appropriate dial plan files and imports them along with the designated registry entries to restore the exported dial plan. Interaction Migrator does not perform a merge on the dial plan; it overwrites the existing entry. Therefore, **back up the dial plan before the import** to save any modifications.

# Interaction Attendant

When importing Interaction Attendant profiles to CIC, the default Attendant profile is overwritten with any imported profiles and nodes. If the configurations overwrite results in errors when opening Interaction Attendant, address these errors manually in Interaction Attendant, post-import.

## Queue/IVR Values

Genesys deprecated the line queue reporting and queue period statistics server parameters (**LineQueueReportingInterval** and **QueuePeriodStatisticsInterval**) in CIC 3.0 in favor of a **Report Configuration** tab on the **Server Configuration** dialog box. After using Interaction Migrator to import data, run IC Setup Assistant to move these parameters to their correct location.

# Interaction Migrator Installation

## Interaction Migrator Versions

Interaction Migrator updates with each CIC 2015 R1 or later release. Ensure that you download and install the appropriate version of Interaction Migrator from the [PureConnect Product Downloads page](#).

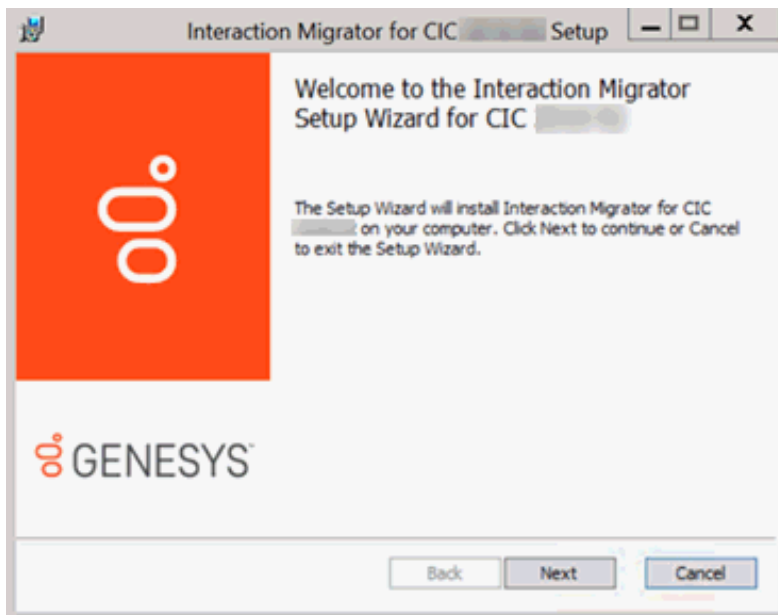
**Note:** Genesys no longer supports earlier versions of Interaction Migrator updated with CIC 3.0 SUs or CIC 4.0 SUs.

## Install Interaction Migrator

Complete these steps to install Interaction Migrator.

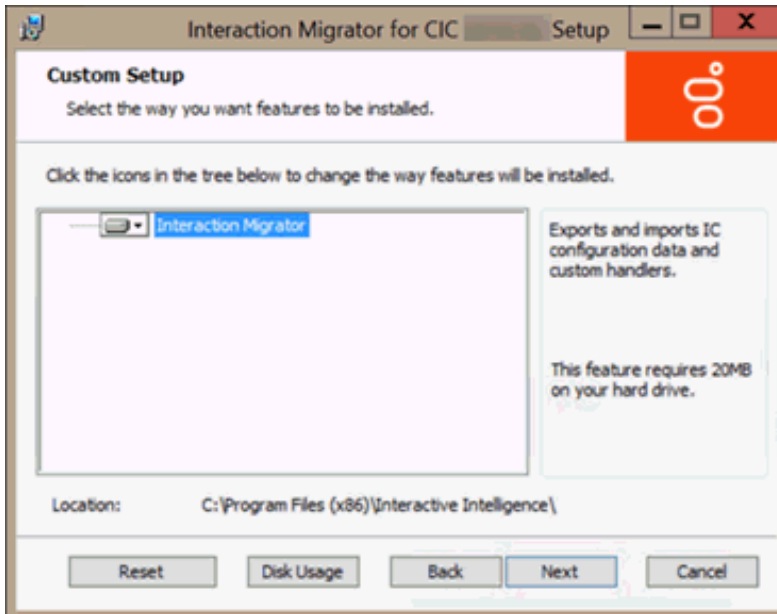
### To install Interaction Migrator

1. If Interaction Migrator is installed already, uninstall it.
2. Ensure that you have installed the appropriate Microsoft .NET Framework version on the CIC server or Interaction Media Server. For more information, see [Microsoft .NET Framework Requirements](#). If you didn't install Microsoft .NET Framework, the Interaction Migrator install prompts you to install it.
3. Open the [PureConnect Product Downloads page](#) and review any notes.
4. Ensure that you install the appropriate version of Interaction Migrator for your migration. For more information, see [Interaction Migrator Installation Versions](#).
5. Download and copy the Migration .iso to a file server.
6. Locate the Interaction Migrator install .msi file (for example, Migrator\_2015\_R2.msi) on the Migration .iso and start the install.
7. On the **Welcome** page, click **Next**.

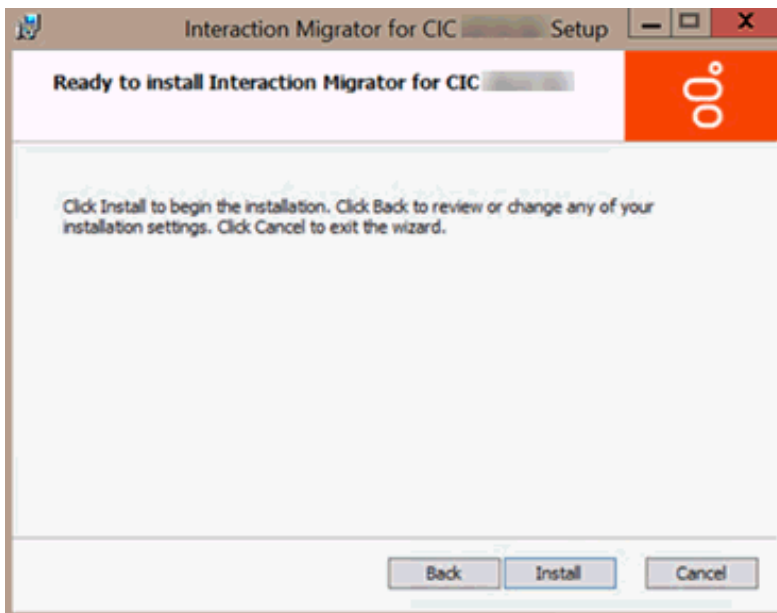


8. On the **Custom Setup** page, click **Next**. We recommend that you keep the default location.

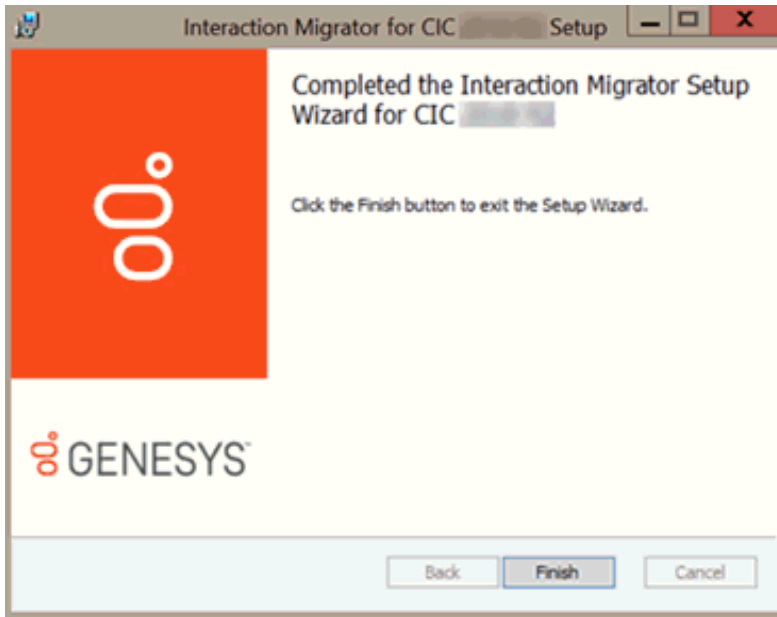




9. On the **Ready to Install Interaction Migrator** page, click **Install**.



10. When the installation is complete, click **Finish**.



The install places the Interaction Migrator executable and other files in the default folder (or folder that you specified), and under **Start->Programs->Interactive Intelligence->Interaction Migrator**.

# About CIC Data Export and Import

Interaction Migrator allows you to export and import CIC configuration data. The procedures are the same for both migrations and recovery – the only distinction is that during an import, you select either **Migration Mode** or **Recovery Mode**.

## Tracing

Interaction Migrator uses the same tracing functionality as CIC. 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 it generates logs only when Interaction Migrator is running. Tracing levels are at 100% by default; however, you can adjust them as needed.

## CIC Service

Interaction Migrator requires you to stop the CIC Service when exporting or importing CIC data. The export process can be processor intensive, so to avoid a Switchover or any call interruptions, stop the CIC Service. The import process can only run when the CIC Service isn't running. If you cannot schedule a system outage for your CIC system, there are two options:

- If you have a Switchover pair, you can stop CIC Service on the backup server and take the export from there.
- If you only have a single CIC server (no Switchover pair), you can run Interaction Migrator Console to perform your export. For more information, see [About Interaction Migrator Console](#).

When performing imports on Switchover pairs, stop the CIC Service on both the primary and backup servers. Do not import configuration data on a backup server, even if you stopped the CIC Service, while the other CIC server is running. If you did, the backup CIC server would overwrite the imported data with the replicated data from the primary CIC server, or worse, leave the pair in an invalid state.

## Data Interdependencies

The following items have interdependencies. If you choose to export any of these items, their interdependent items export also to prevent an invalid configuration after the import.

- **AdminConfig** – This item contains all of the license assignments. If you choose to export AdminConfig, the system selects Users and Workstations so license assignments don't import to Users/Stations that don't exist on the CIC 2015 R1 or later server.

**Note:** If you are not importing at the same time, or have not imported the Tracker Config data already, **do not** import the AdminConfig file. The AdminConfig file pulls in User data so importing it without the Tracker Config data causes problems with the Tracker Config data.

- **IPA** – If you choose to export this item, the system selects all of the other IPA-related items. If you don't import all the IPA configuration settings, IPA won't work after the import.
- **IP\Handlers** – If you choose to export this item, the system selects `<SERVER>\IP`. Conversely, if you select `<SERVER>\IP`, the system selects `IP\Handlers`. Export these items together so that the Handlers function properly after the import.
- **IP Phones** – If you choose to export IP Phones, the system selects IP Phone Proxy Groups. Export these items together to allow the IP Phones to function properly after the import.
- **Interaction Recorder Master Key File** – If you choose to export the Interaction Recorder Master Key File, the system selects Interaction Recorder. Export these items together to allow Interaction Recorder to function properly after the import.

## Export Data Encryption

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

# CIC Data Export

## CIC Server Configuration Data Files

When you run the Interaction Migrator export on a CIC server, you can select which CIC configuration data to export. The Interaction Migrator export puts the selected CIC server configuration data into a compressed file with an `.ininmigr` extension. In essence, it is a zip file, encrypted with other zip compression files within the main file.

The configuration data file name is unique. It consists of the server name combined with a date and time stamp, for example: `<Servername>_12062011091650.ininmigr`.

**Note:** You can append this file with ".zip" or another file compression utility so that anyone can open it with that utility. The configuration data file saves to a separate directory so as not to overwrite any existing data.

## Export CIC Data

Export CIC data from a CIC server.

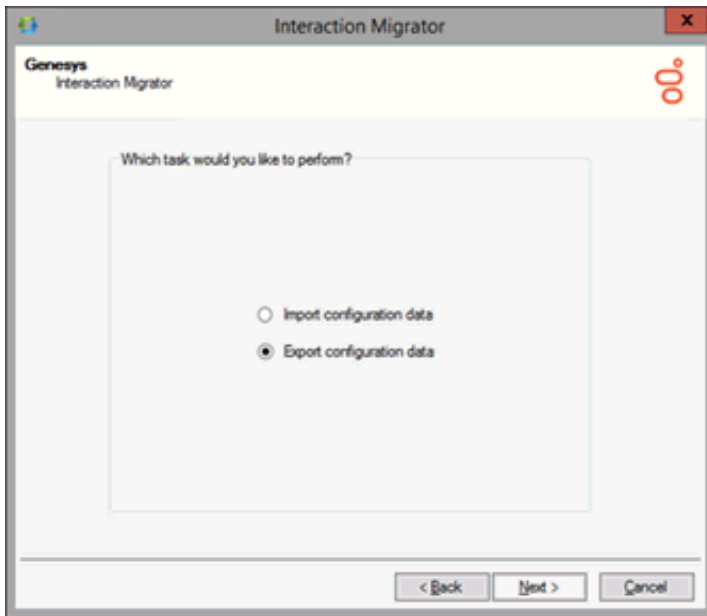
### To export CIC data

1. Stop the CIC Service on the "export" CIC server.
2. Start Interaction Migrator on the **CIC server from which you want to export configuration data**, either from the Interaction Migrator executable file in the `\I3\IC\Migrator` folder, or from **Start->Programs->PureConnect->Interaction Migrator**.
3. 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 dialog box.

4. On the **Task Selection** page, select **Export configuration data** and then click **Next**.

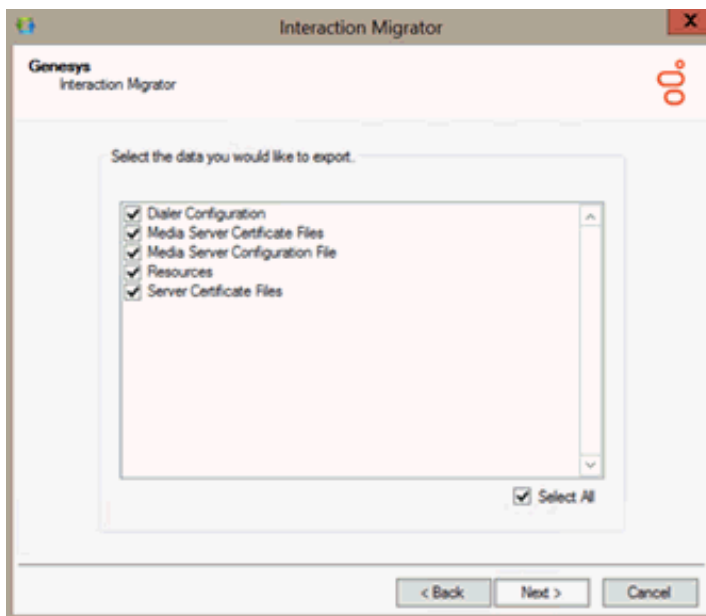


5. On the **Data Component Selection** page, ensure that **Select All** is selected (default) to export all data components and then click **Next**.

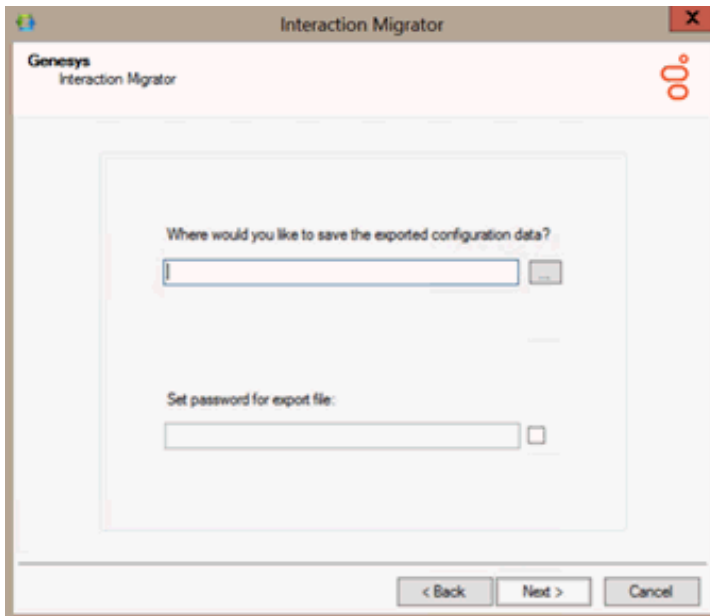
**Note:** We recommend that you keep **Select All** selected (default) to export all data components. When you import the data, you can select which data components you want to import at the time.

When you export users, you must also export workgroups so that workgroup memberships export also.

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.

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

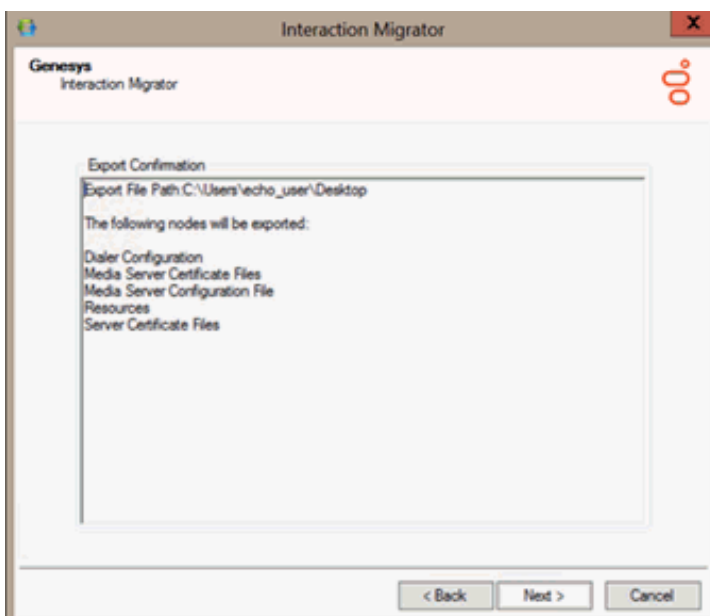
**Browse to the location where you store your handler customizations**

Open the folder where the custom handlers are located. The CIC install creates the \I3\IC\Handlers\Custom folder by default. You can use this folder or specify one you created yourself. All subdirectories are included in the migration.

**Set password for export file**

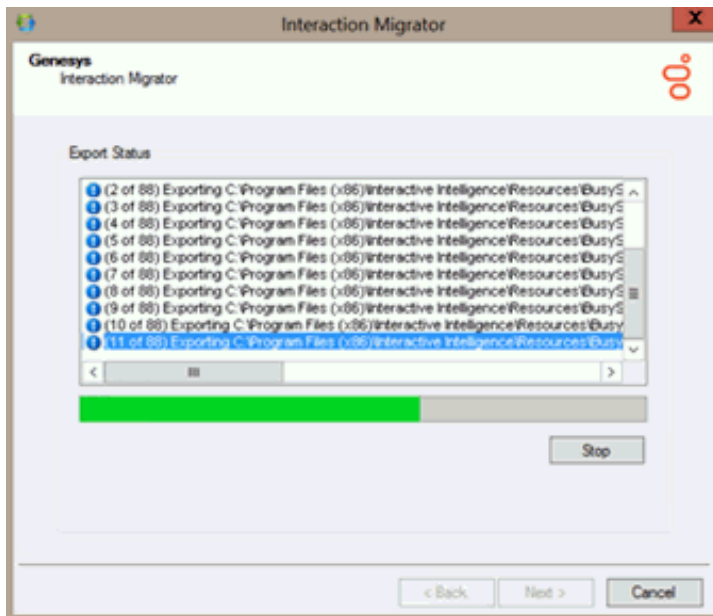
The password setting is optional. The default selection does not set the password; however, you can set a password since the export file could contain sensitive data. If so, click the check box to specify the password. There are no limitations for setting the password.

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



**Note:** To change any selections, click **Back** twice to return to the **Export Confirmation** dialog box. After you make your changes, start the export process again. Interaction Migrator creates a CIC configuration data file.

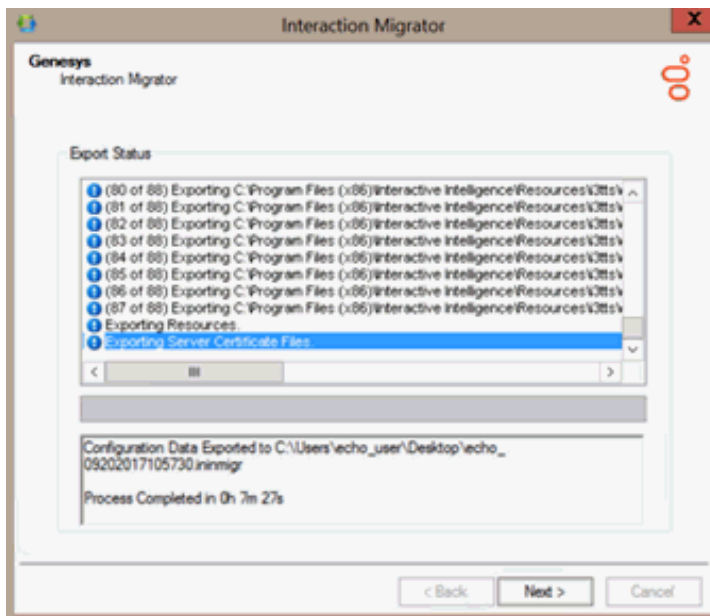
The **Export Status** page displays real-time updates during the export process.



The export process can take several minutes depending on the amount of data that is exporting.

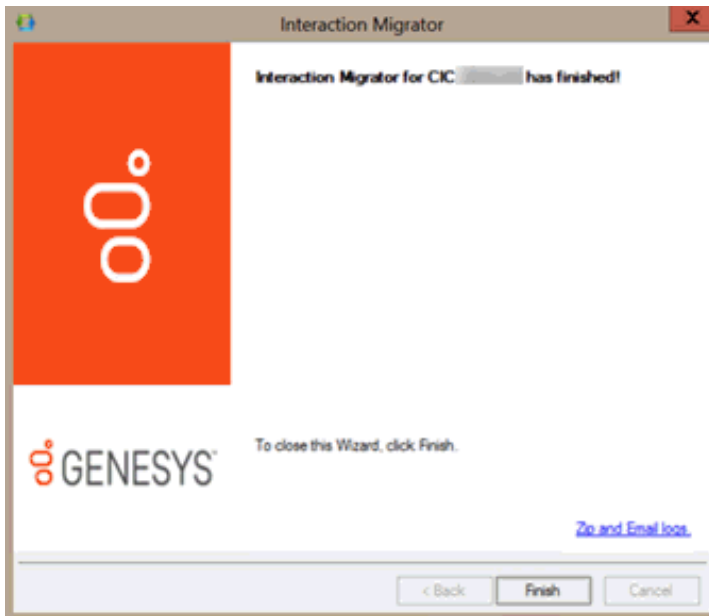
**Note:** Stop the process at any time by clicking **Stop**. After stopping the process, you can go back and change any selections without exiting Interaction Migrator.

- 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. Click **Next** to continue.



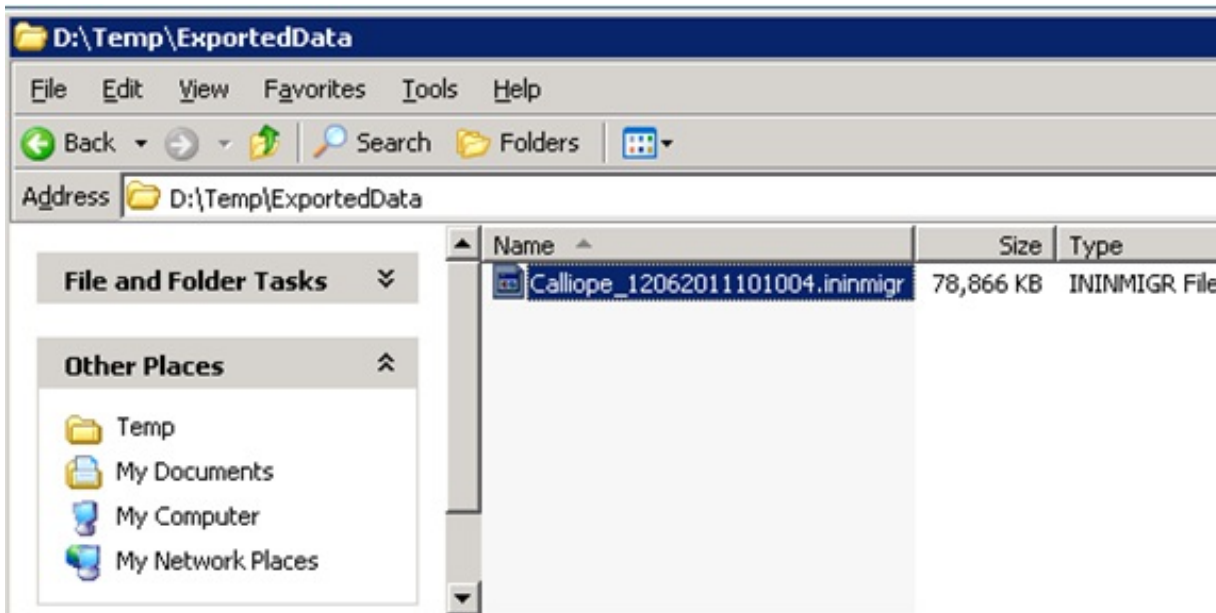
**Note:** The CIC configuration data file name is unique. It consists of the server name and a date/time stamp. In this example, the CIC configuration data file is `Calliope_12062011101004.inimigr`. If the migration doesn't complete successfully, Interaction Migrator creates multiple export files instead of the single ".inimigr" file.

- Click **Finish** to close Interaction Migrator and, if you stopped **CIC Service**, restart it.



**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 Genesys PureConnect Customer Care.

- To prepare for the import procedure, locate the **CIC configuration data file on the CIC server you exported from** and **copy the file to a separate media (USB key or other writable 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 "import" CIC server. To restore, import the CIC configuration data file using Interaction Migrator. Run the Interaction Migrator export frequently so that the data in the stored CIC configuration data file is up-to-date.



# CIC Data Import

## Before Importing CIC Data

Before you run Interaction Migrator to import CIC data:

- Ensure that you are using the appropriate version of Interaction Migrator. For more information, see [Install Interaction Migrator](#).
- Stop the CIC Service before importing CIC data. If you cannot stop CIC Service, the alternative is to run Interaction Migrator Console. For more information, see [About Interaction Migrator Console](#).
- Log on to the "import" CIC server using the same domain user account under which to run the CIC Service. That is, the same CIC administrator account you ran IC Setup Assistant as part your migration or recovery scenario.

## Import Methods

When using Migration Mode to import data, Interaction Migrator imports the information based on the type of data (for example, DS entries or file-based items). The following information describes the different methods Interaction Migrator uses to import data.

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### DS Entries - Overwrite Mode

When Interaction Migrator imports the following items, Interaction Migrator overwrites any existing items that are already present on the target server. For example, if you export User A from a CIC 2015 R1 server and import User A to a CIC 2017 R1 server that already has a User A, any User Properties that are in the import overwrite those properties that exist on the CIC 2017 R1 server. So, if you changed User A's extension to "1234" on the CIC 2017 R1 server and then performed an import where User A's extension is "4567" on the CIC 2015 R1 server, after the import is complete User A's extension is "4567."

Any new properties that you added to the item on the CIC 2017 R1 server remain unchanged. If you gave a user new security rights on the CIC 2017 R1 server, those rights don't change during the import process.

This type of migration applies to every class type except for the following items. For these items, the system performs special processing to prevent merge conflicts.

- Server Parameters – The system appends "\_migrated" to the parameter name to prevent collisions.
- DNIS Mappings – The system merges the routing table with any existing mappings to prevent deletion of any mappings.
- Handlers – The system does not import Handlers because they get recreated during the install.
- CIC Data Sources – The system does not import default Data Sources.

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### File based items - Overwrite Mode

If a file exists on the server when importing file-based items, usually the system does not overwrite the file. The following items are cases where the system does overwrite the existing file:

- LRA Configuration file
- Dial Plan files

## Migration and Recovery Modes

When you import data using Interaction Migrator, it supports two modes:

- **Migration mode** (default) indicates that the data you are importing is from another server. Interaction Migrator can apply to the data various import rules built into the application. Use migration mode any time you are importing data from a server running a previous CIC or Interaction Media Server version, or from a different machine name (for same version to same version migrations). Consider server name and site name changes when moving data from one server to another. Interaction Migrator changes the data at run time before it imports the data into the new server.
- **Recovery mode** indicates that the data imports as is; therefore, Interaction Migrator doesn't apply the various import rules. In Recovery mode, Interaction Migrator restores the data back to the way it was when you exported it; Interaction Migrator doesn't change the data at run time. Only use this mode to import data that you exported from a machine running the same CIC version.

**Note:** Interaction Migrator **does not** support recovery on an Interaction Media Server.

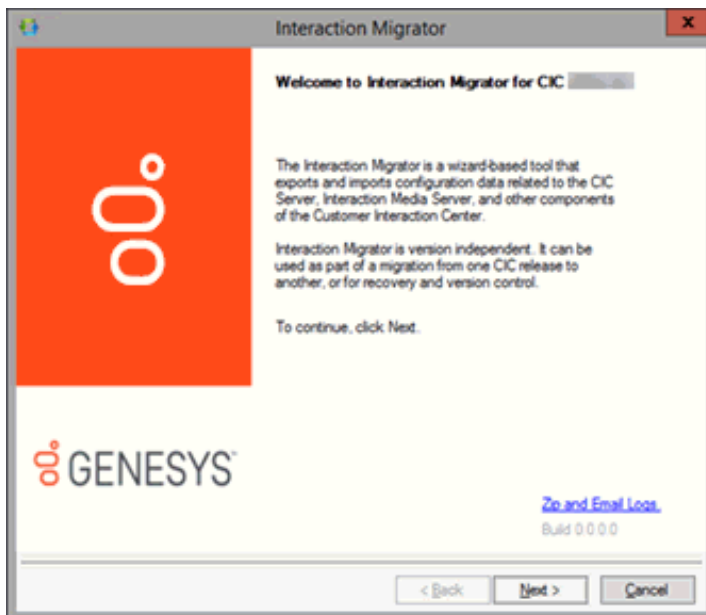
## Import CIC Data

Import the CIC configuration data file on either the same CIC server (Recovery mode) or another CIC server (Migration mode).

**Note:** You may need to run IC Setup Assistant after the Interaction Migrator import to make database changes. For more information, see [Database Changes and IC Setup Assistant](#).

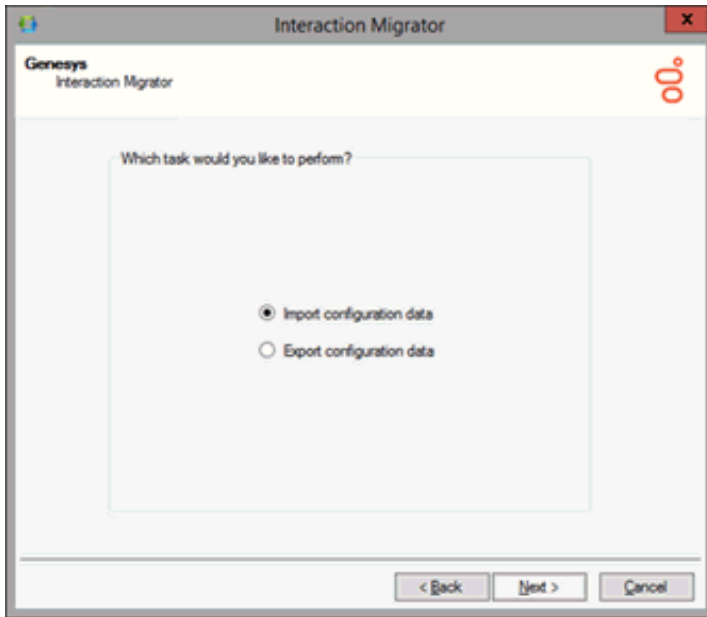
### To import CIC data

1. Copy the **exported CIC configuration data file** from your storage media to a location on the **"import" CIC server**. For example, copy the file to D:\Temp\ImportData.  
**Important!**  
Do **NOT** copy the file to the root directory of the drive where CIC is installed (for example, do not copy to the root of \I3\IC) as critical files are overwritten).
2. Log on to the **"import" CIC server** using the same domain user account under which to run CIC Service. The account is the same CIC administrator account used when you ran IC Setup Assistant as part your migration scenario.
3. **Stop CIC Service** on the "import" CIC server. Interaction Migrator requires you to stop **CIC Service** when importing CIC data.
4. Start Interaction Migrator, either from the Interaction Migrator executable file in the \I3\IC\Migrator folder, or from **Start->Programs->PureConnect->Interaction Migrator**.
5. On the **Welcome** page, click **Next**.

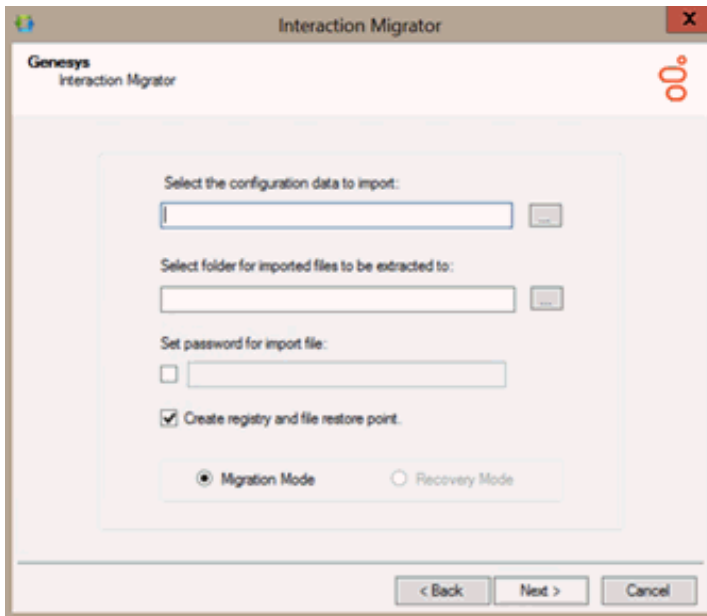


If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the dialog box.

6. On the **Task Selection** page, select **Import configuration data** and then click **Next**.



- On the **Configuration** page, specify the **location of the exported CIC configuration data zip file** and the **folder to which to extract the CIC configuration data file**. Select either **Migration Mode** or **Recovery Mode**.



#### Select the configuration data to import

Browse to the location of the exported CIC configuration data file (for example, Calliope\_12062011101004.inimigr) on the USB key or other writeable storage location.

#### Select folder to which to extract imported files

Browse to the destination directory for the extracted CIC 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 (for example, do not copy to the root of \I3\IC) as critical files are overwritten.

#### Set password for export file

If you set a password on the CIC configuration data file, select the check box and type the password. If not, leave this box empty.

#### Create registry and file restore point

Interaction Migrator creates a registry restore point for restoring the registry back to the point before Interaction Migrator was run to import the CIC configuration data. When you select this option, Interaction Migrator performs a

registry export of the `Interactive Intelligence` key in hive format. This file is in the `\I3\IC\Migrator` folder and has a file name extension of `.hive`.

We recommend that you keep the default setting.

### Migration Mode

In Migration mode, when moving data from one server to another, consider any server name and site name changes. Interaction Migrator changes the data at run time before importing it into the new server.

### Recovery Mode

In recovery mode, Interaction Migrator restores the data to its pre-import values. Interaction Migrator doesn't change the data at run time.

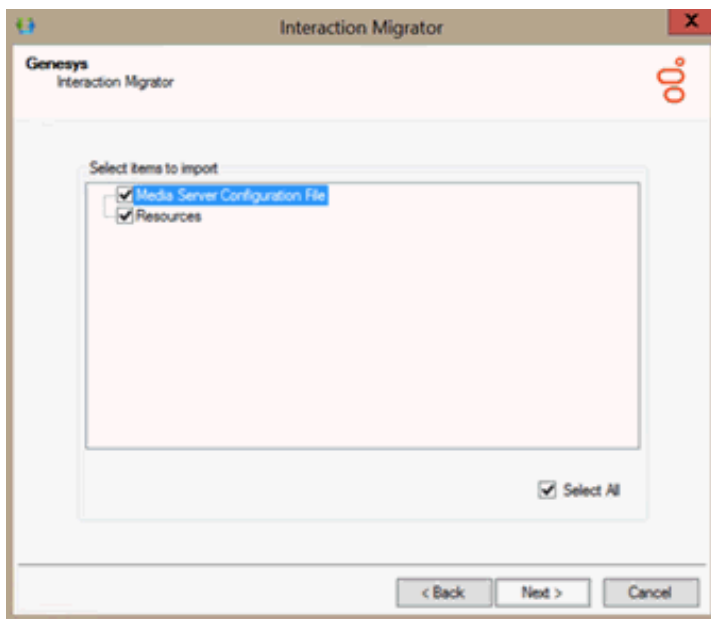
- Click **Next**. The following rules apply, depending on the mode you selected:

#### Migration Mode:

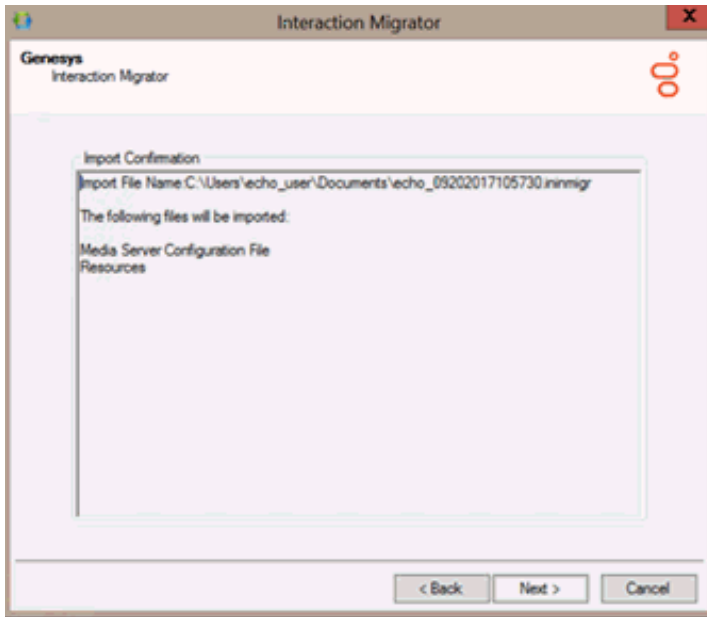
You **cannot** import a configuration data file created using an older version of Interaction Migrator. However, you **can** import a configuration data file created using the same version of Interaction Migrator but an older build number.

#### Recovery Mode:

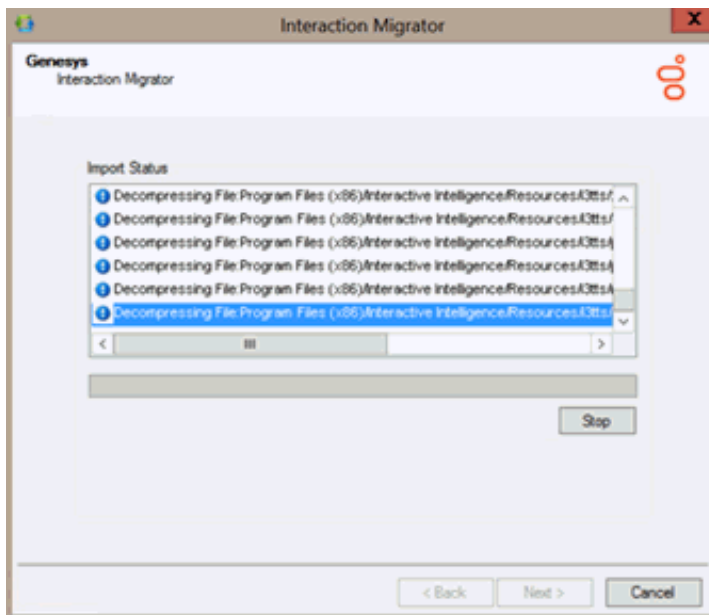
- You **cannot** import a configuration data file created using an older version of Interaction Migrator.
  - You **cannot** import a configuration file created using the same version of Interaction Migrator but an older build number.
  - You **cannot** import a configuration file that was exported from a different CIC version. You can only export/import the same CIC versions.
- After Interaction Migrator loads the CIC configuration data file and extracts the data, in the **Import Items** page, select the components to import and then click **Next**.



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



11. Click **OK** to continue. The **Import Status** page displays real-time updates during the import process.

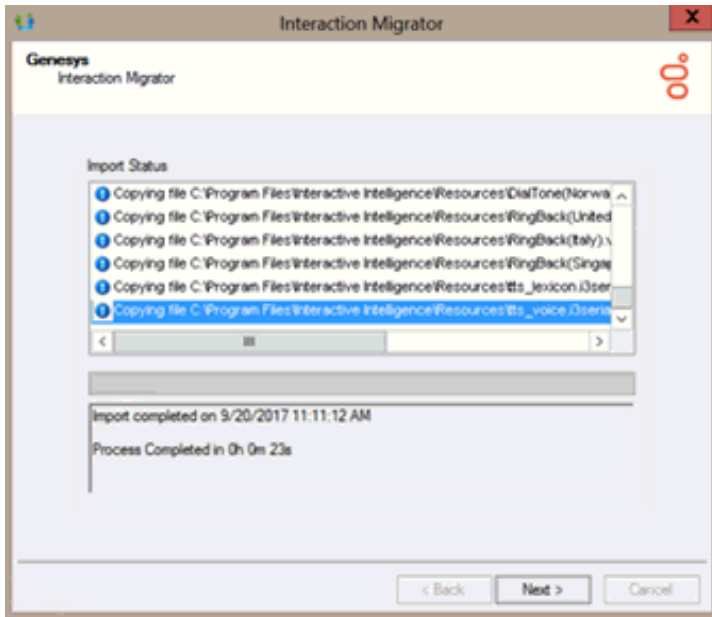


The import process can take several minutes depending on the amount of data to export.

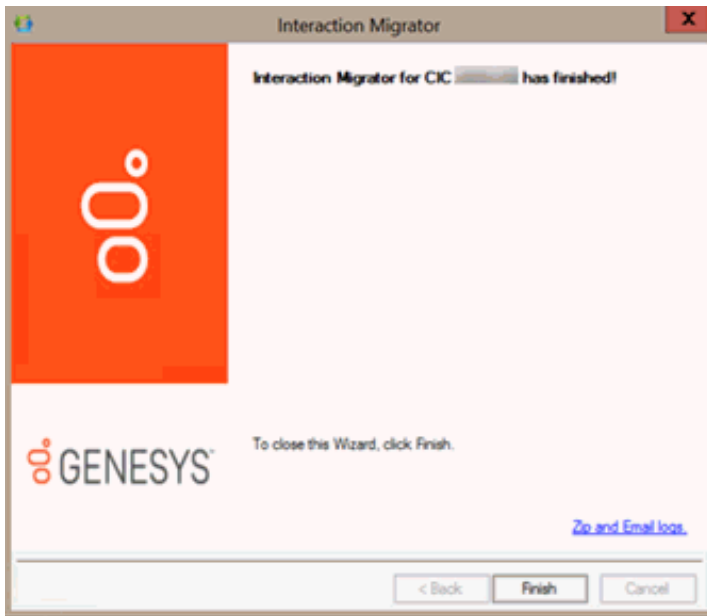
**Note:**

You can stop the process at any time by clicking **Stop**. After stopping the process, you can go back and change any selections without exiting Interaction Migrator.

12. When the import process is complete, the **Import Status** page displays when the import completed and how long the process took. Click **Next** to continue.



13. Click **Finish** to close Interaction Migrator and restart IC 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.

*Copyright and trademark*

## Reset Structured Parameter Values

If your CIC system includes **structured parameters created with the type "Secrets,"** you must reset the values after importing CIC data in both Migration and Recovery modes. These structured parameters are encrypted with a machine-specific key that the Admin Server generated.

- For **migrations**, 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.
- For a **backup/recovery operation** on the same machine where Interaction Migrator exported the parameters from, the values *may* work, but sometimes Admin Server can generate a new key. Therefore, it is best to reset the structured parameter values after the import.

## Database Changes and IC Setup Assistant

If you selected the Data Sources component, Interaction Migrator exports and imports the CIC Database Configuration settings. However, Interaction Migrator does *not* update the database on the database server or reconfigure ODBC settings.

The following migration or recovery scenarios indicate when and when NOT to run IC Setup Assistant to upgrade the database and reset the CIC Data Sources and ODBC objects.

---

### When to run IC Setup Assistant

Run IC Setup Assistant following the Interaction Migrator import if you are importing from **one CIC version on one server to the same CIC version** on a different server.

IC Setup Assistant overrides any changes Interaction Migrator made.

---

### When NOT to run IC Setup Assistant

Do NOT run IC Setup Assistant following the Interaction Migrator import if you imported data in a recovery scenario. There is no need to update the database or reconfigure ODBC settings.

For more information, see "Database Migration and Recovery" in [About Importing Configuration Data](#).

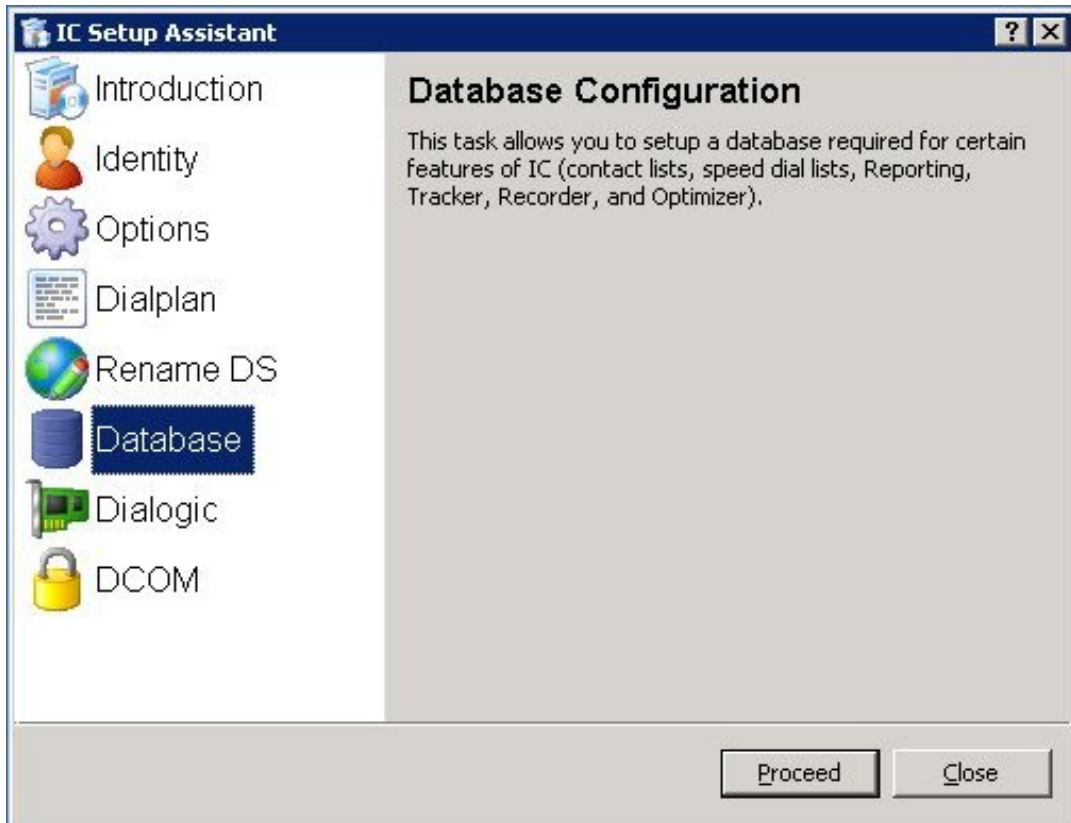
---

### Modify Database Configuration in IC Setup Assistant

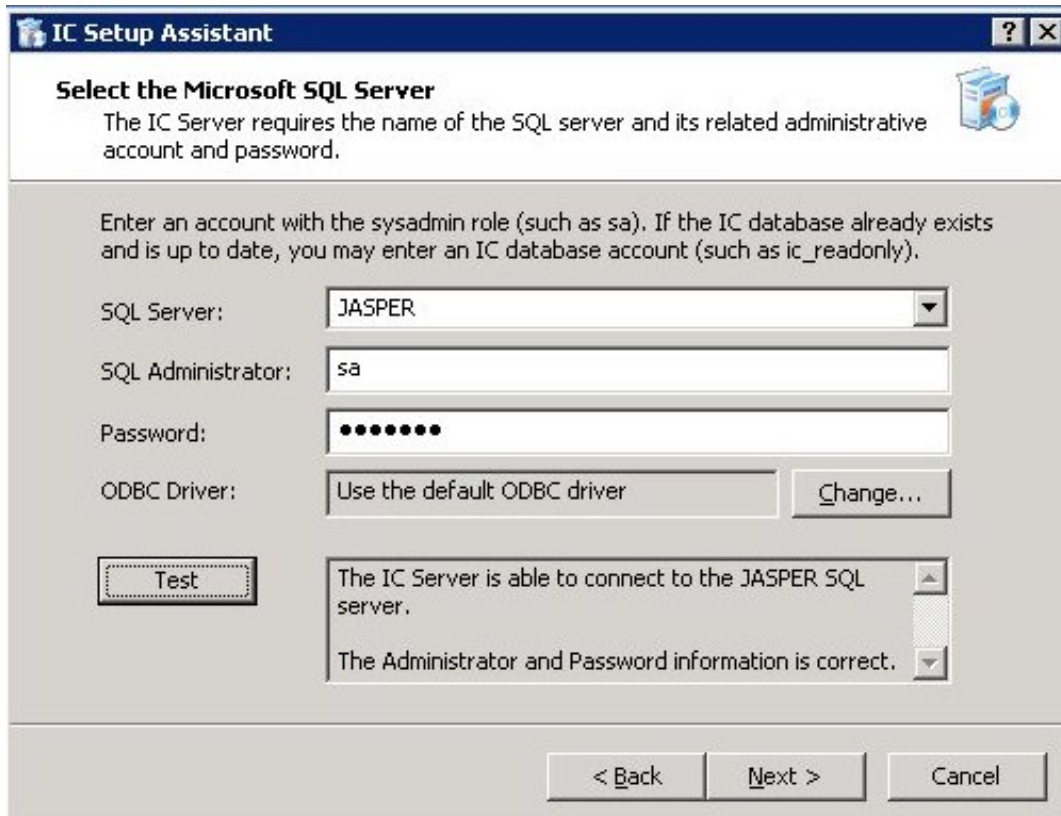
Run IC Setup Assistant following the Interaction Migrator import **ONLY** when you are importing from **one CIC version on one server to the same CIC version** on a different server.

#### To modify database configuration in IC Setup Assistant

1. Start IC Setup Assistant from the CIC server desktop by selecting **Start->Programs->PureConnect->IC Setup Assistant**. The "rerun" Setup Assistant **Welcome** page appears, showing the tasks allowed in a rerun.
2. Select the **Database** option.

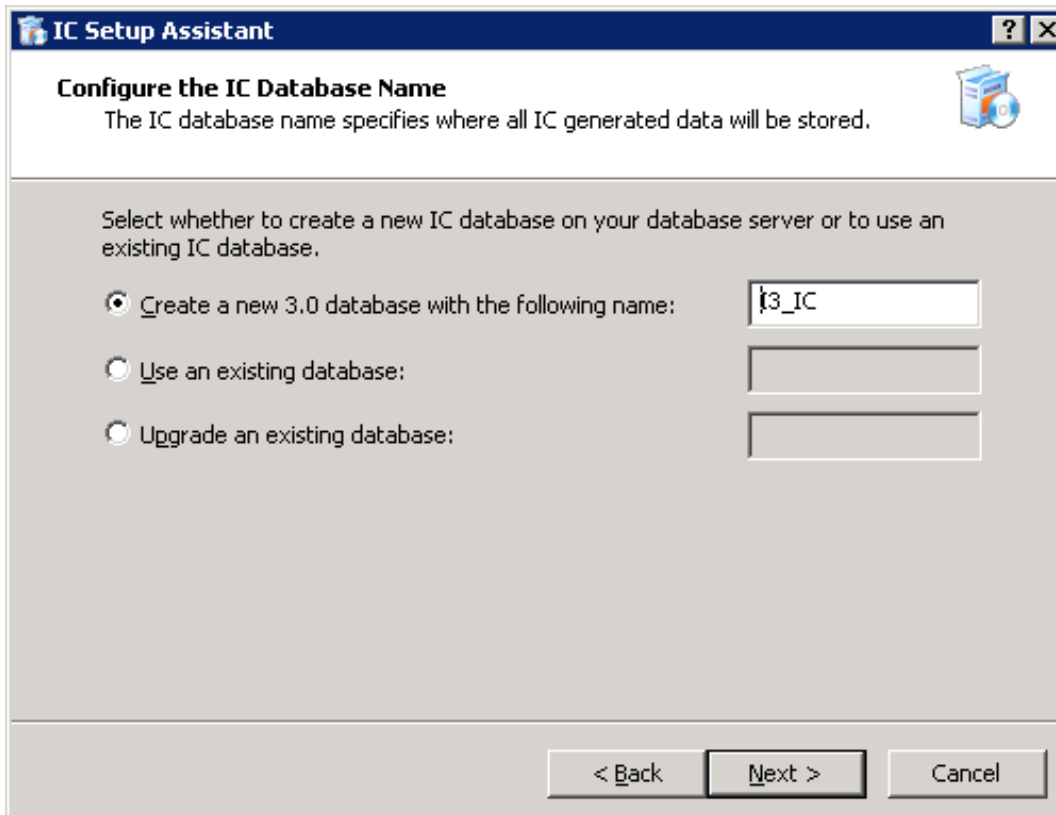


3. On the **Select a Reporting Option** page, select **Store all reporting data in a database**.
4. On the **Database Configuration** page, select the database you want to configure: **Microsoft SQL Server** or **Oracle**. This example is for Microsoft SQL Server.
5. On the **Select the Microsoft SQL Server** page, select the SQL Server that hosts the CIC database for the CIC server you imported the CIC configuration data file to. Type the appropriate database administrator account and password.



6. On the **Configure the CIC Database Name** page, select the option applicable to your migration scenario.





**Recovery:**

Select **Use and existing database**.

**Migration:**

We recommend that you test the server with the imported configuration data before moving over to production. Select one of the following options:

- If you do *not* want to mix test data and production data, click **Use an existing database** and type the test database name.

**Note:**

After testing is complete and before moving over to production, rerun Setup Assistant again and this time point to the (upgraded) database.

- If you already upgraded the database, click **Use an existing database** and type the database name.
- If you have not upgraded the database, click **Upgrade an existing database** name.

7. On the **Configure the SQL Database CIC Accounts** page, type the passwords for the **IC\_Admin**, **IC\_User**, and **IC\_ReadOnly** accounts.
8. Commit your choices.
9. When **IC Setup Assistant** completes the configuration, restart your computer.

# Interaction Media Server Configuration Data

## Interaction Media Server Configuration Data Files

When you run the Interaction Migrator export on an Interaction Media Server, you can select which Interaction Media Server configuration data to export. The Interaction Migrator export puts the selected Interaction Media Server configuration data into a compressed file with an `.ininmigr` extension. In essence, it is a zip file, encrypted with other zip compression files within the main file.

The configuration data file name is unique. It consists of the server name combined with a date and time stamp, for example: `<Servername>_12062011091650.ininmigr`.

**Note:** You can append this file with ".zip" or another file compression utility so that anyone can open it with that utility. The configuration data file saves to a separate directory so as not to overwrite any existing data.

## Export Interaction Media Server Configuration Data

Export Interaction Media Server configuration data using Interaction Migrator 2015 R1 or later. Save the exported data to an external location.

**Note:** Ensure that the export file name contains the name of your Interaction Media Server.

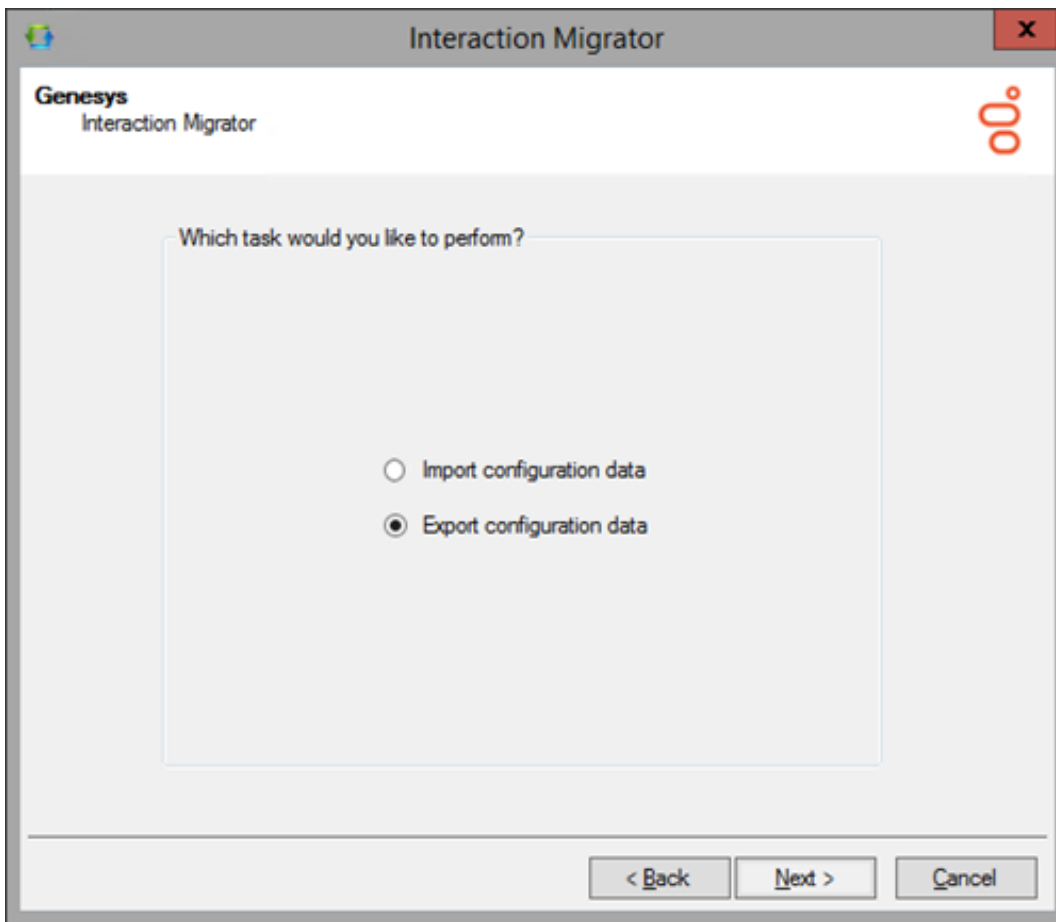
### To export Interaction Media Server configuration data

1. Start Interaction Migrator on the Interaction Media Server, either from the Interaction Migrator **link on the desktop**, or from **Start -> Programs -> PureConnect -> Interaction Migrator**.
2. On the **Welcome** page, click **Next**.

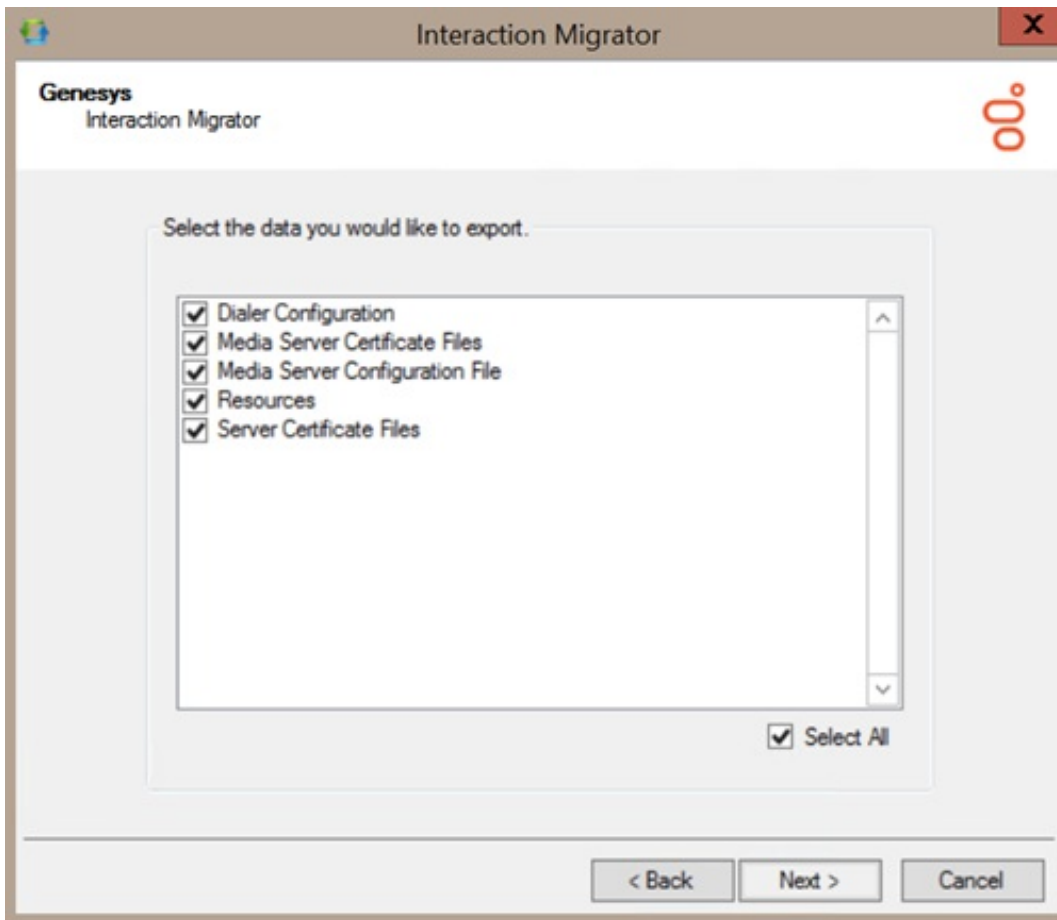


**Note:** If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.

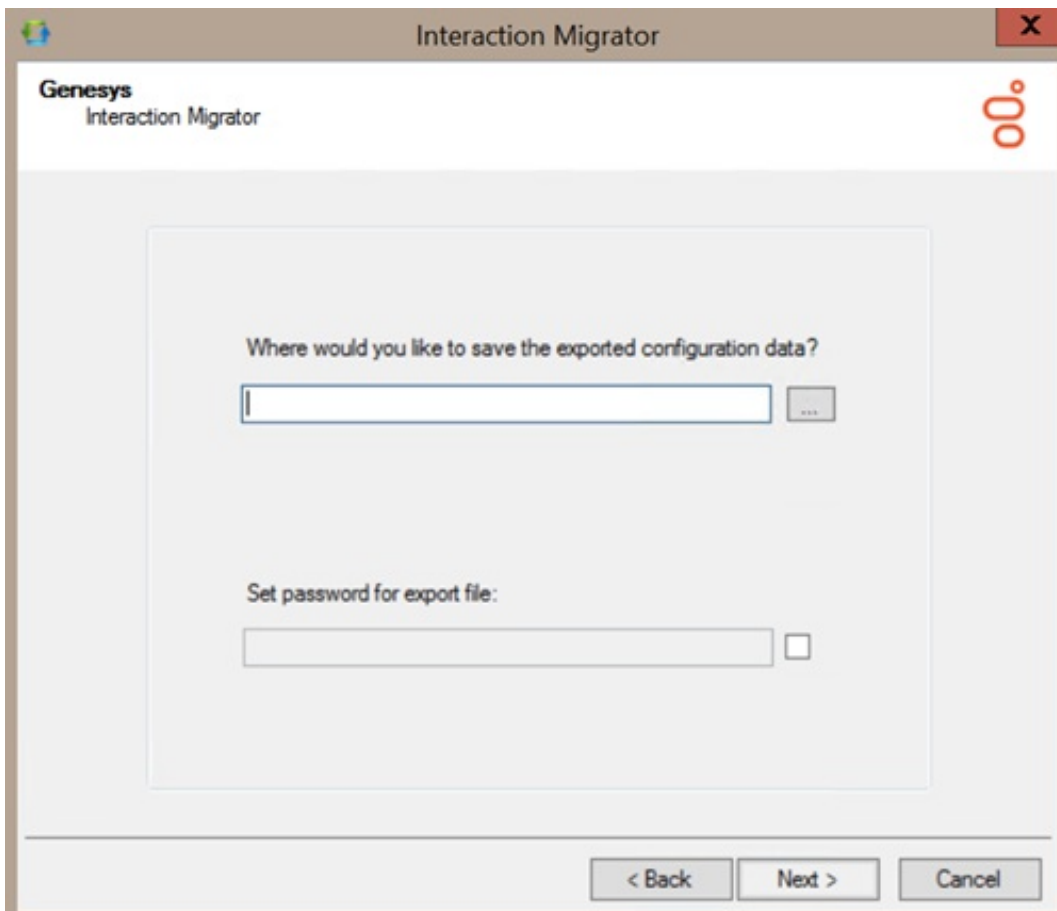
3. On the **Task Selection** page, click **Export configuration data** and then click **Next**.



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**.



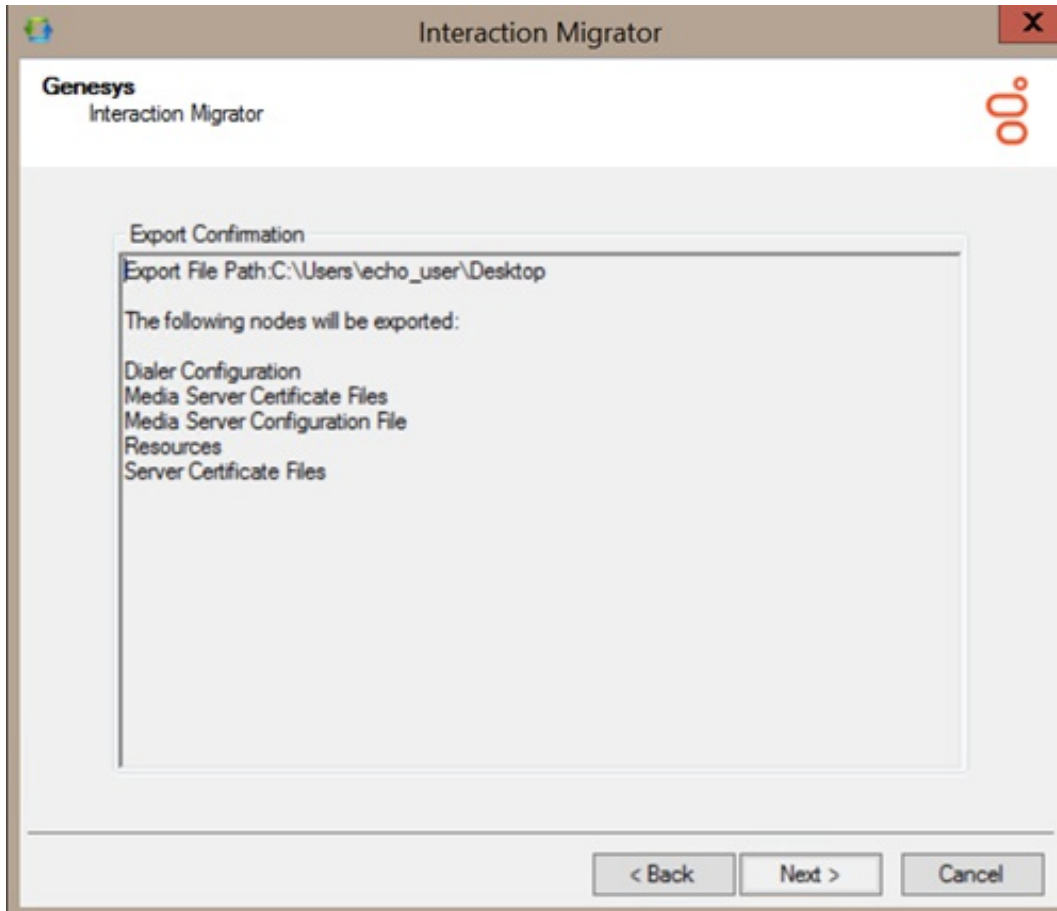
**Where would you like to save the exported configuration data?:** Open the folder where you want to save the exported data, for example, D:\Temp\ExportData.

**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.

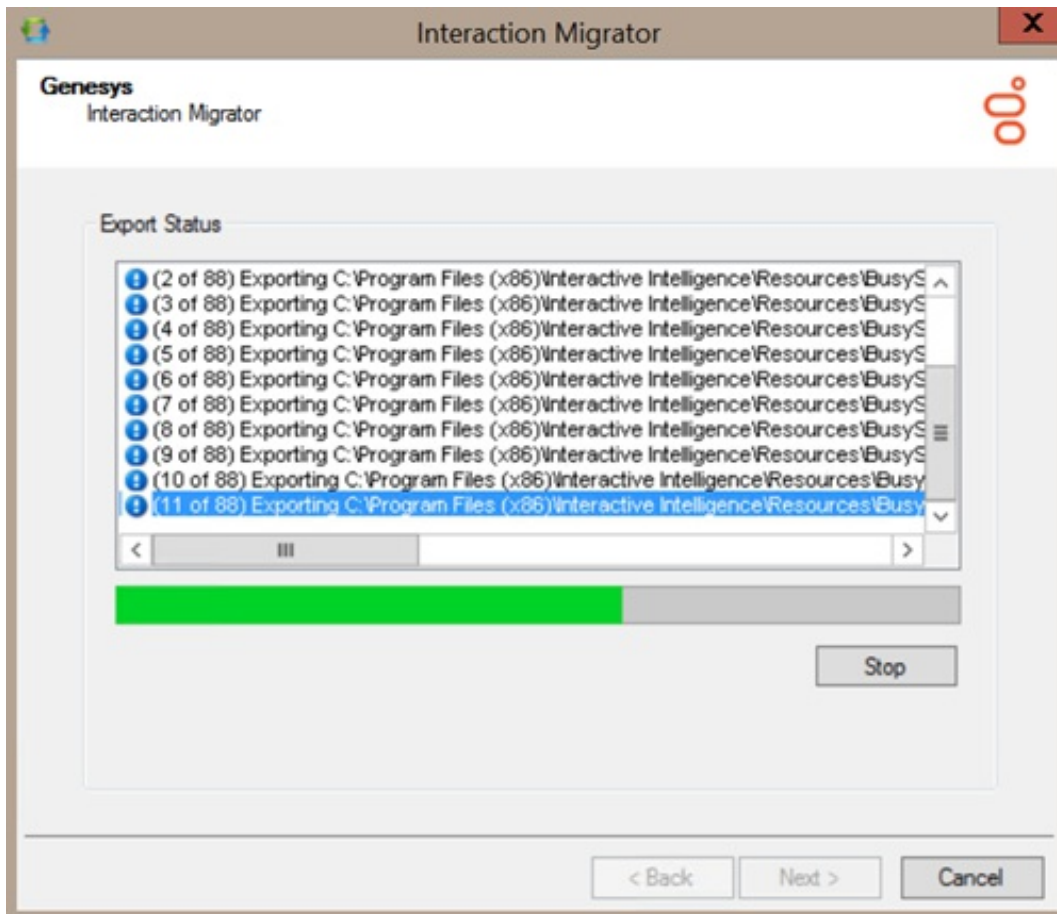
6. On the **Export Confirmation** page, confirm the selections and then click **Next** to start the export process.



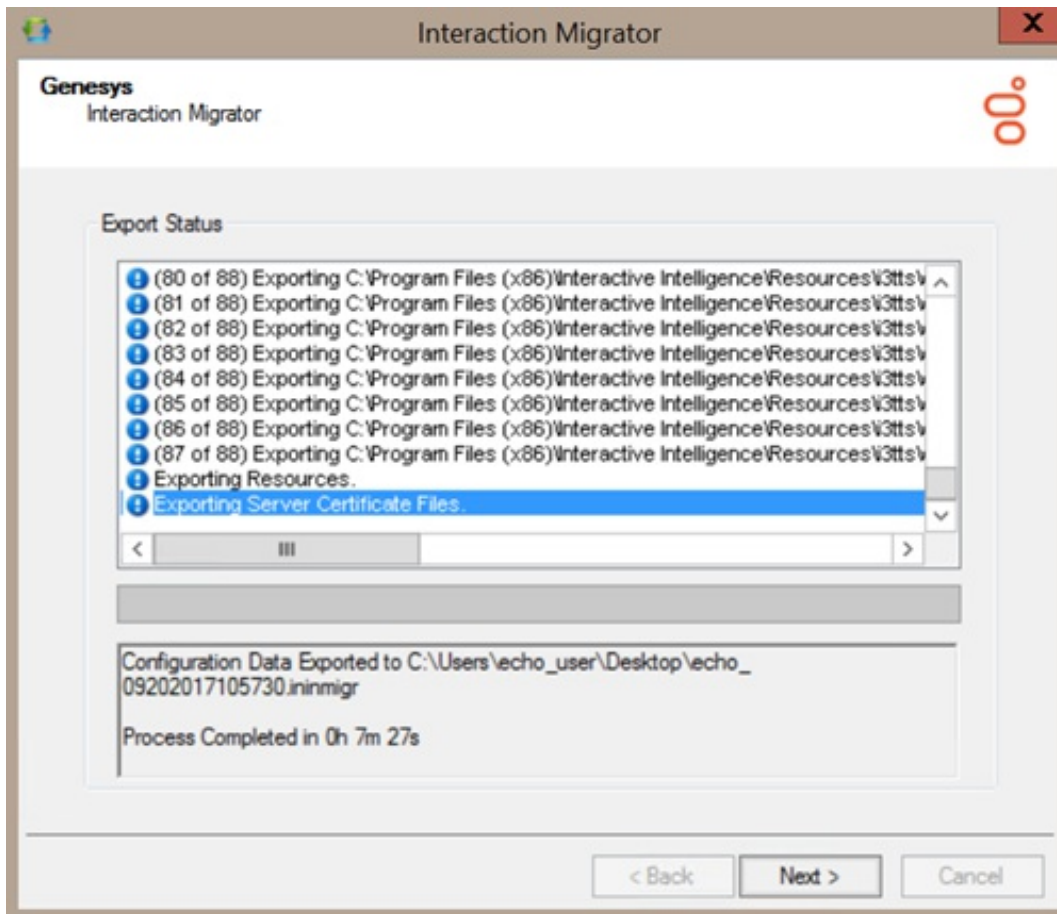
**Note:** To change your selections, click **Back**.

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.

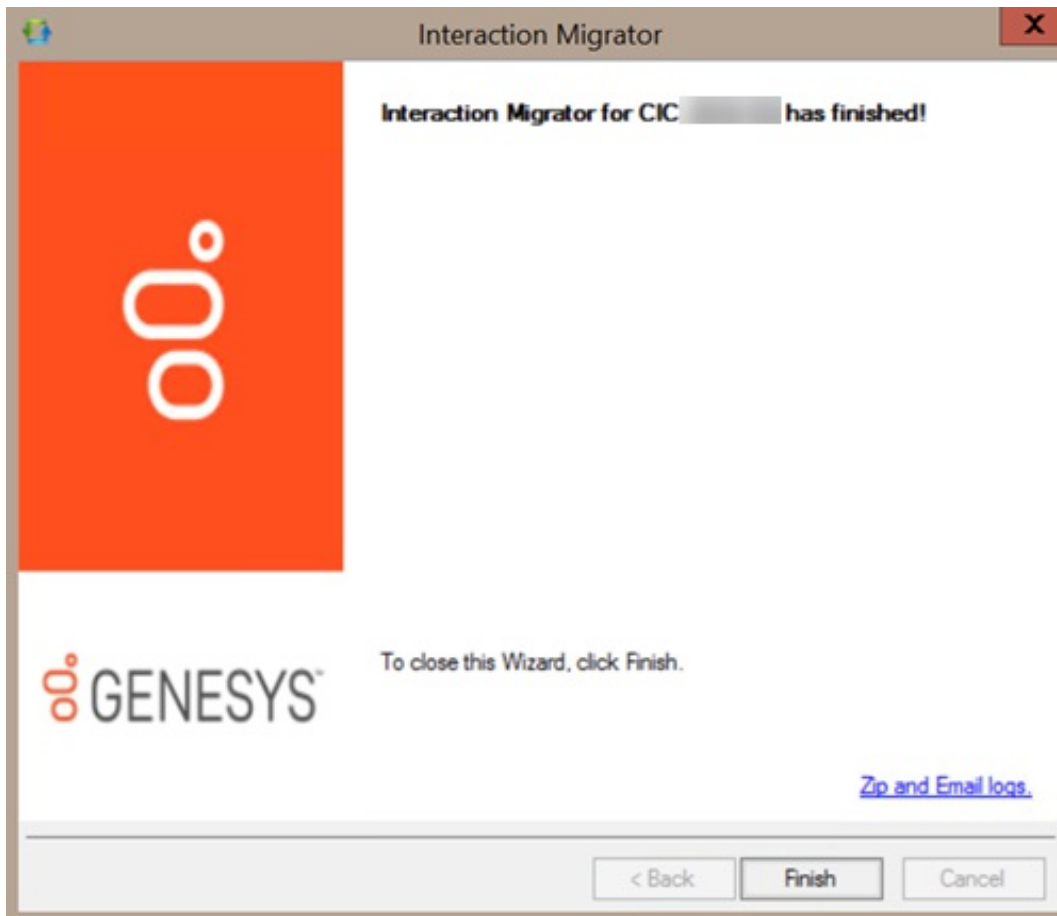


The Interaction Media Server configuration data file name is unique. It consists of the server name combined with a date/time stamp. In this example, the Interaction Media Server configuration data file is `qf_backgammon_07092012143839.inimigr`.

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.

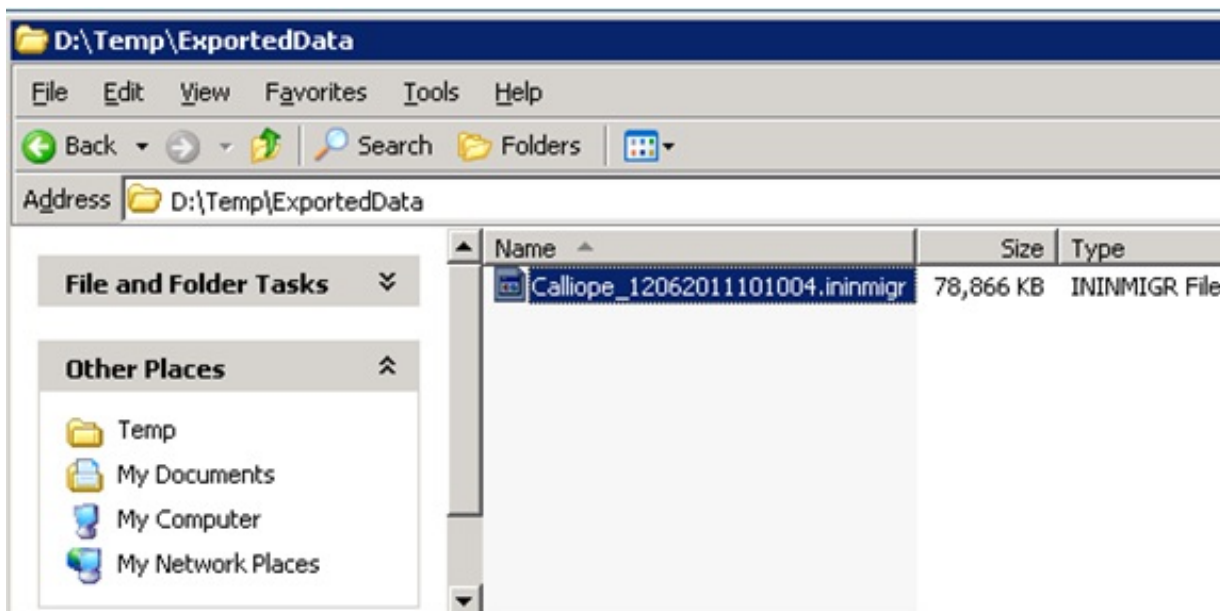
8. Click **Finish** to close Interaction Migrator.



**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 configuration data file on the Interaction Media Server and copy the file to a USB key or other writable 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.





## Import Interaction Media Server Configuration Data

Complete this procedure to import Interaction Media Server configuration data to Interaction Media Server 2015 R1 or later using Interaction Migrator.

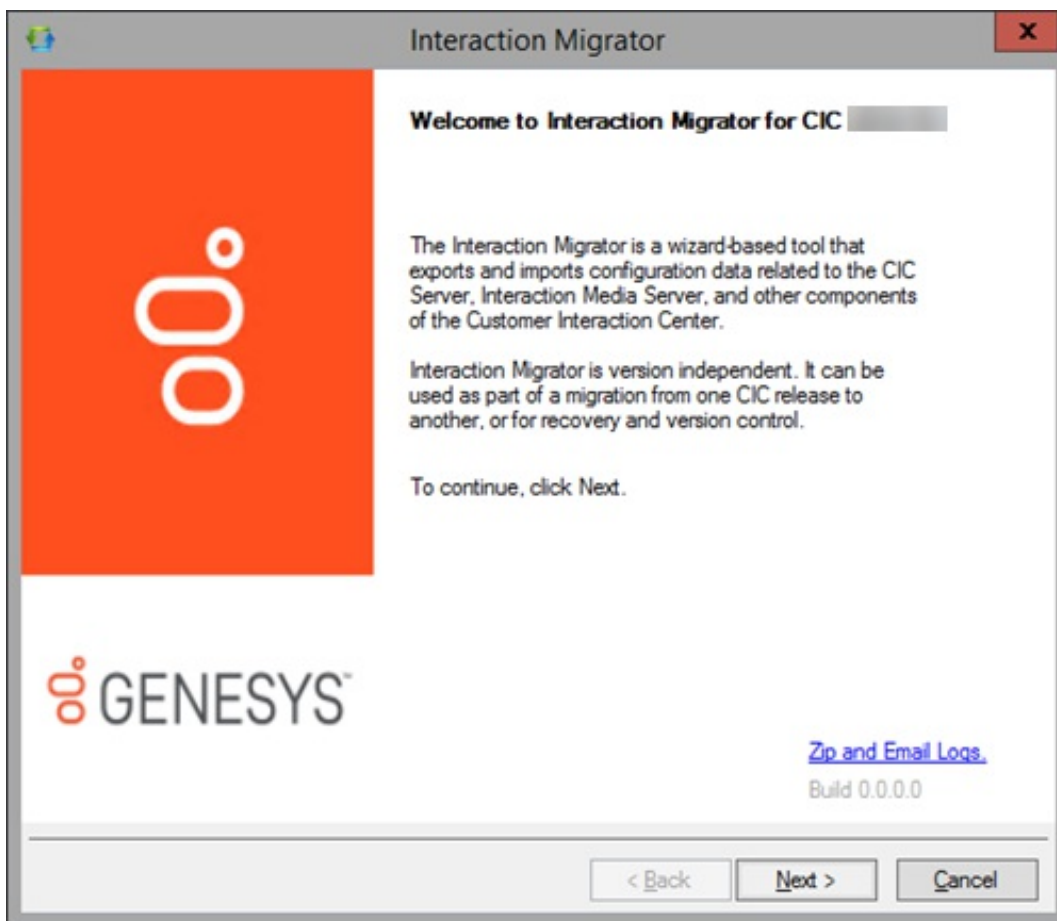
### To import Interaction Media Server configuration data

1. Stop the Interaction Media Server 2015 R1 or later service.
2. Log on to the Interaction Media Server 2015 R1 or later using the same CIC administrator account as when you imported the CIC configuration data.
3. Copy the Interaction Media Server configuration data file from your storage media (as described in the last step in [Export Interaction Media Server Configuration Data](#)) to the Interaction Media Server 2015 R1 or later. For example, copy the file to D:\Temp\ImportData.

#### Important!

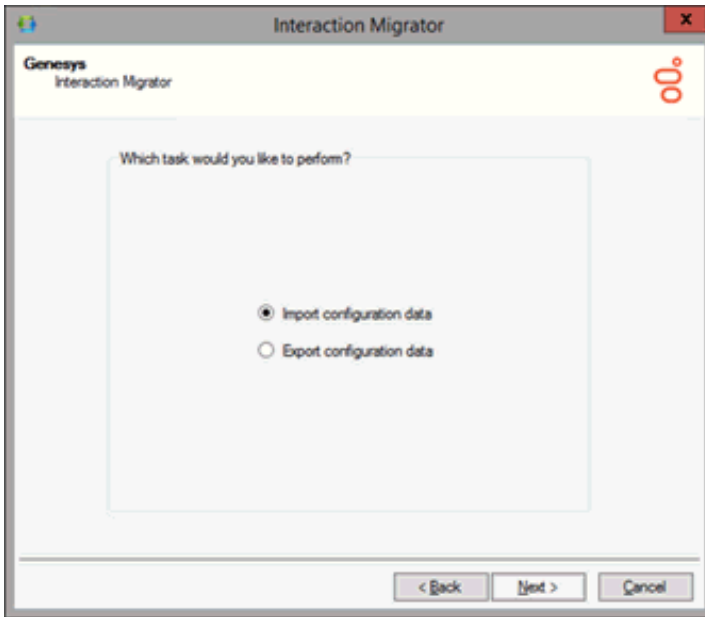
Do **NOT** copy the file to the root directory of the drive where you installed CIC (for example, do not copy to the root of \I3\CIC) as it overwrites critical files).

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**.

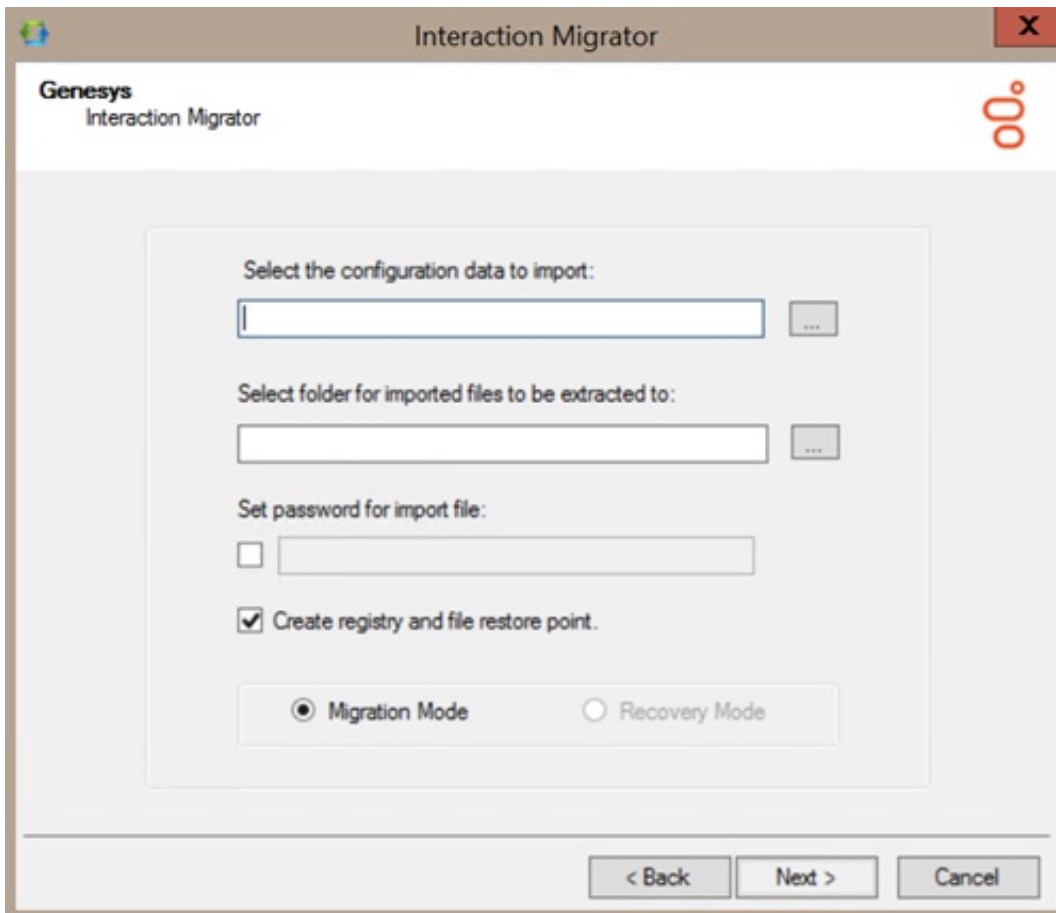


If you contact PureConnect Customer Care for migration assistance, provide them with the version number in the lower right corner of the page.

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 configuration data .zip file and the folder to extract the Interaction Media Server configuration data file. Click **Migration Mode**, and then click **Next**.



**Select the configuration data to import:** Location of the exported Interaction Media Server configuration data file (for example, qf\_backgammon\_07092012143839.inimigr) 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 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 configuration data file.

**[Password]:** Password for the Interaction Media Server configuration data file. This box is available if you selected the **Set password for export file** check box.

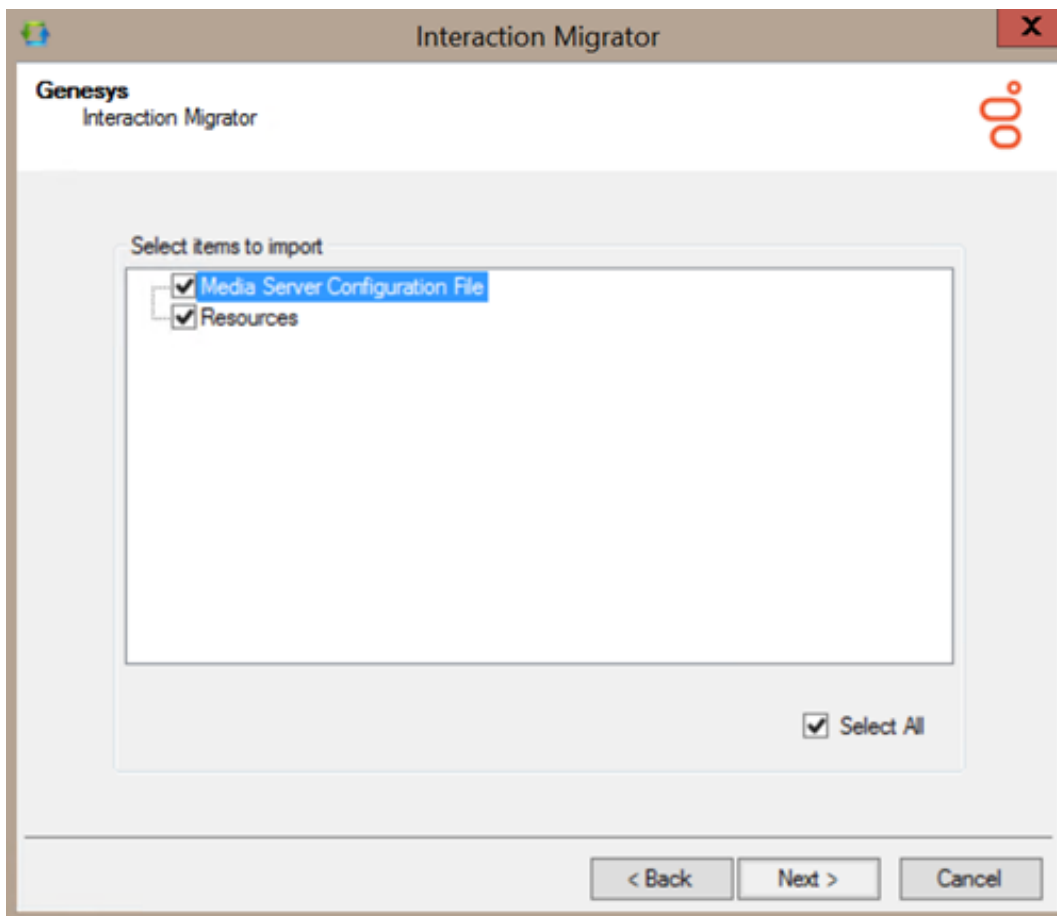
**Create registry and file restore point:** Interaction Migrator creates a registry restore point for restoring the registry back to the point before running Interaction Migrator to import the Interaction Media Server configuration data. When this option is selected, Interaction Migrator runs a registry 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.

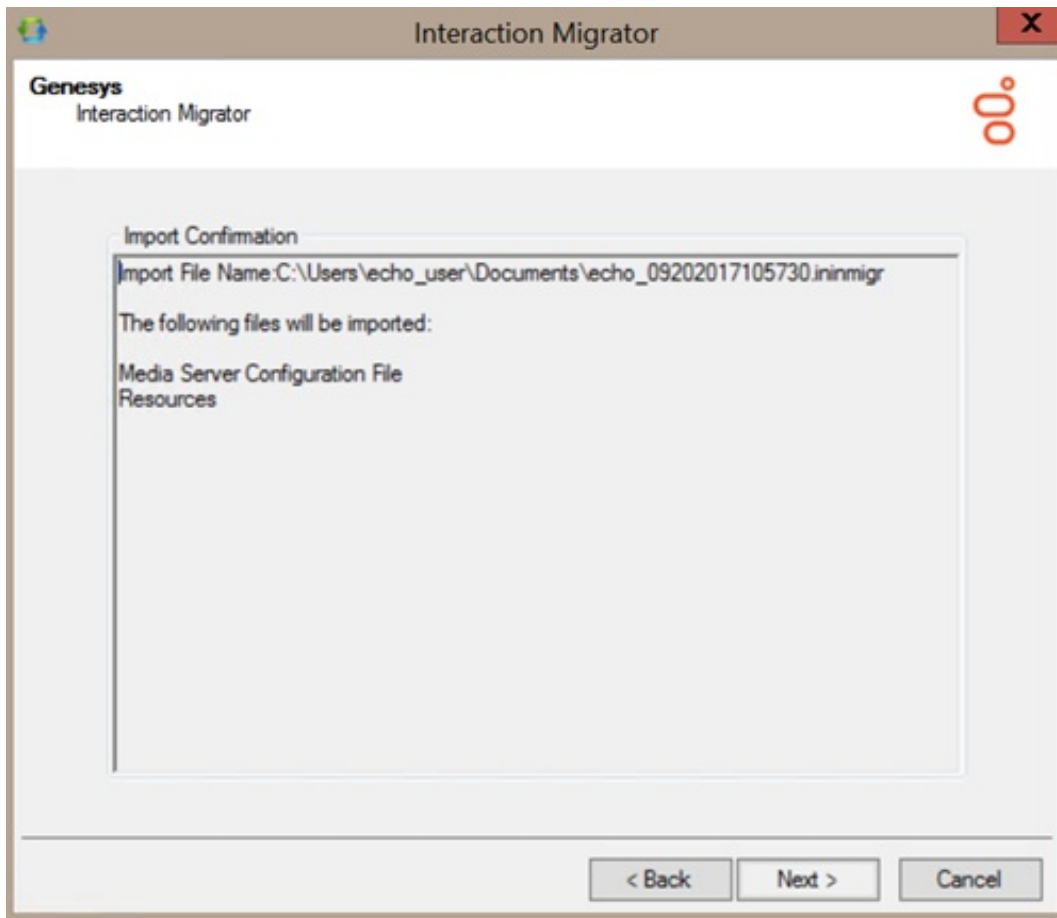
**Notes:**

- 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**.

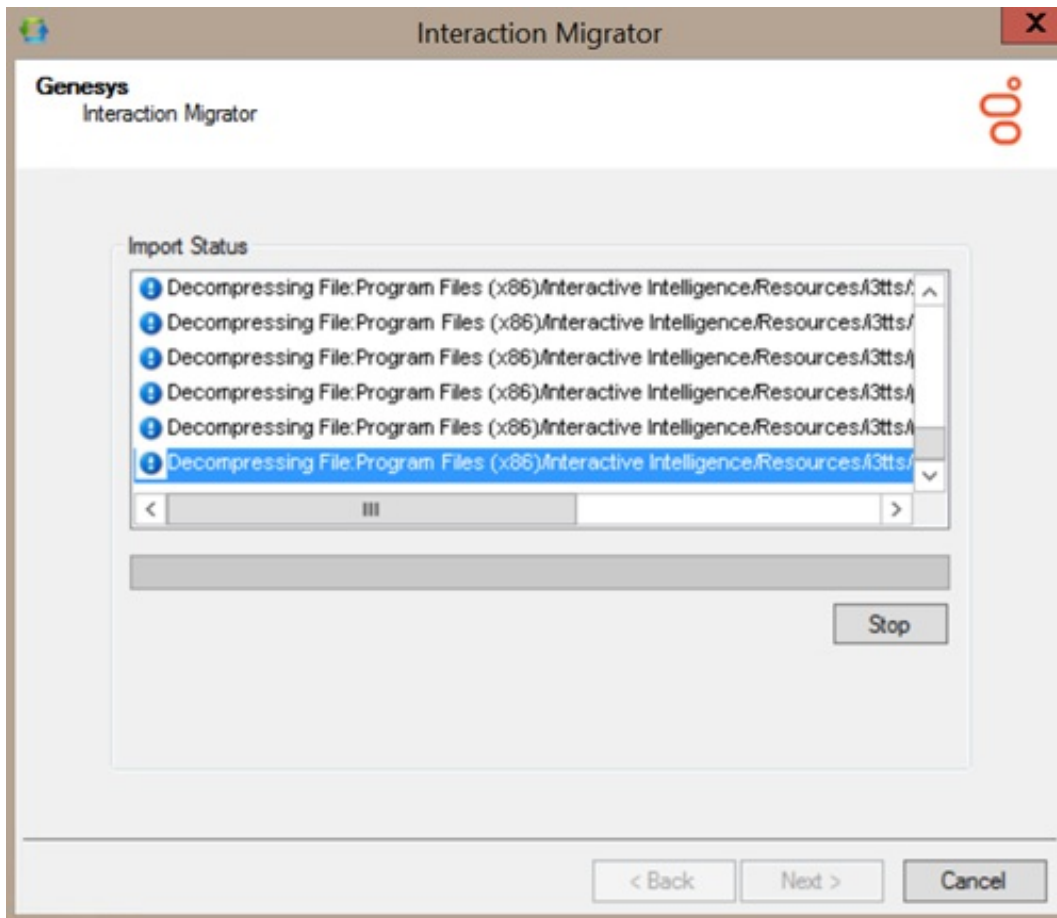


9. On the **Import Confirmation** page, confirm the selections and then click **Next** to start the import process.



**Note:** To change your selections, click **Back**.

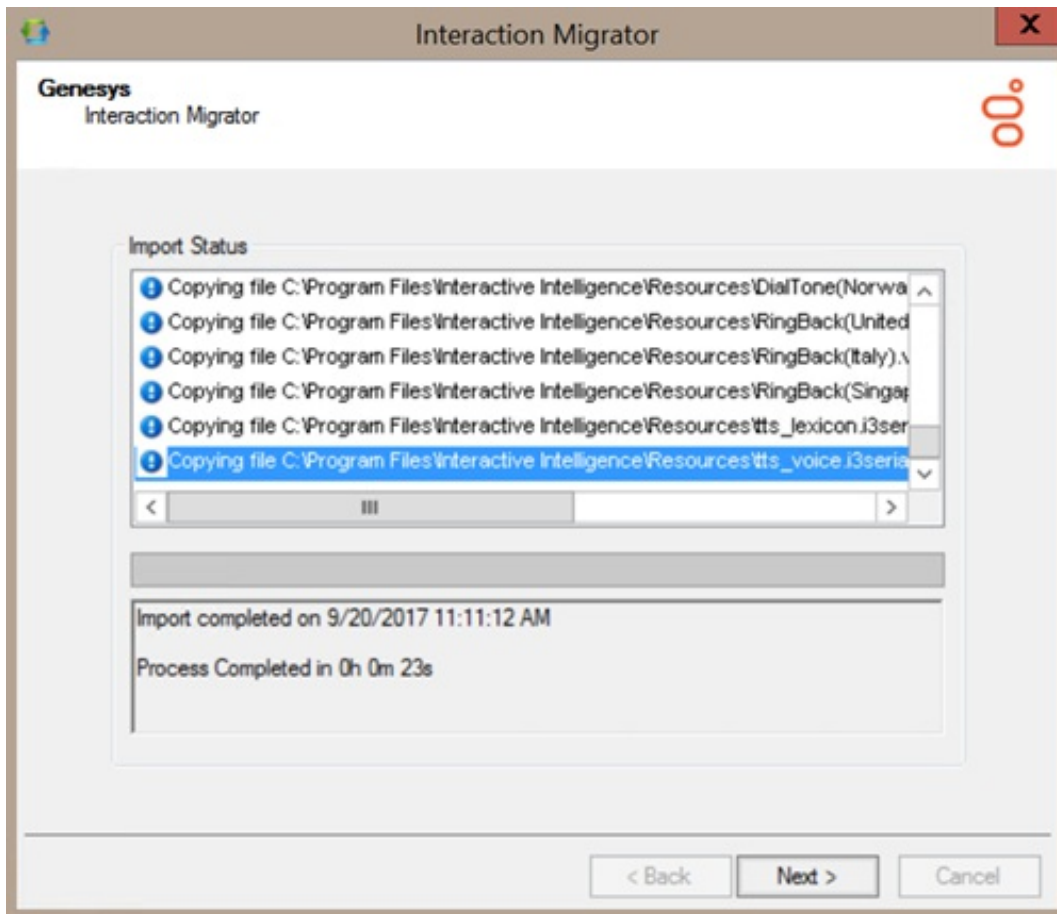
The **Import Status** page displays real-time updates during the import process.



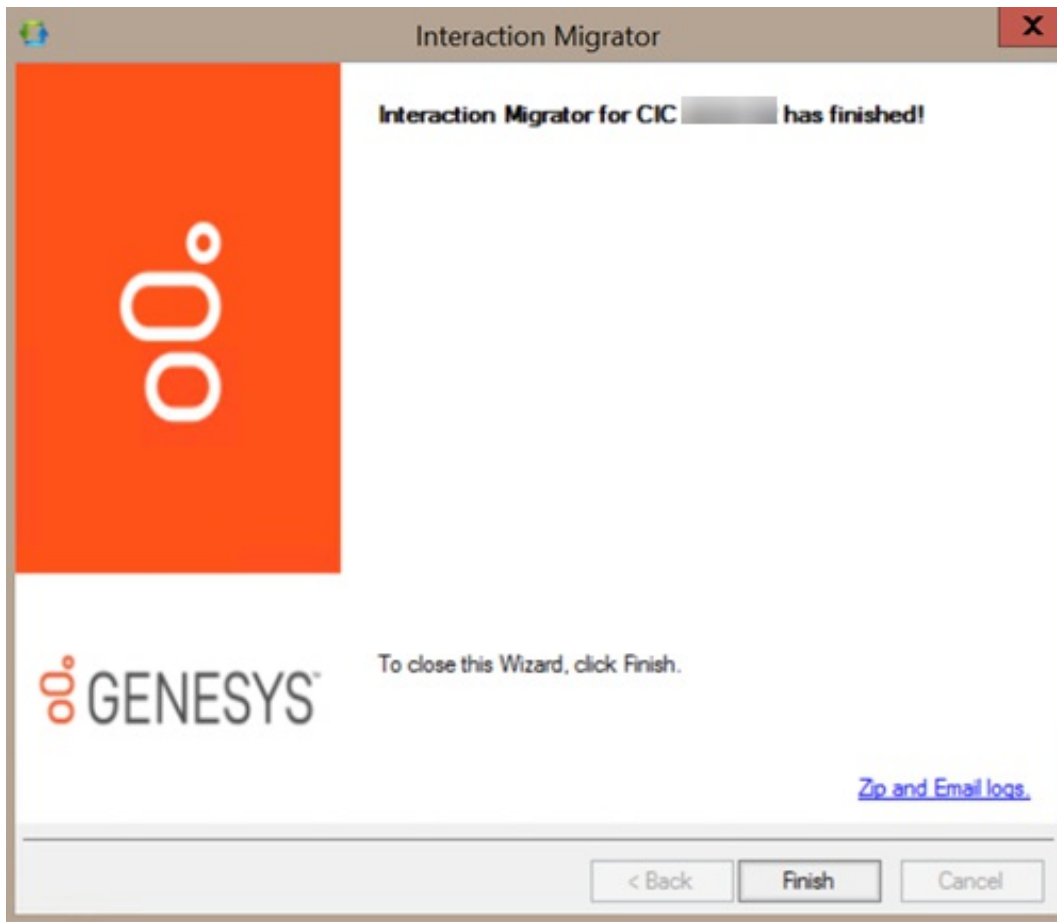
The import process can take several minutes depending on the amount of data being exported.

**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.

# About Interaction Migrator Console

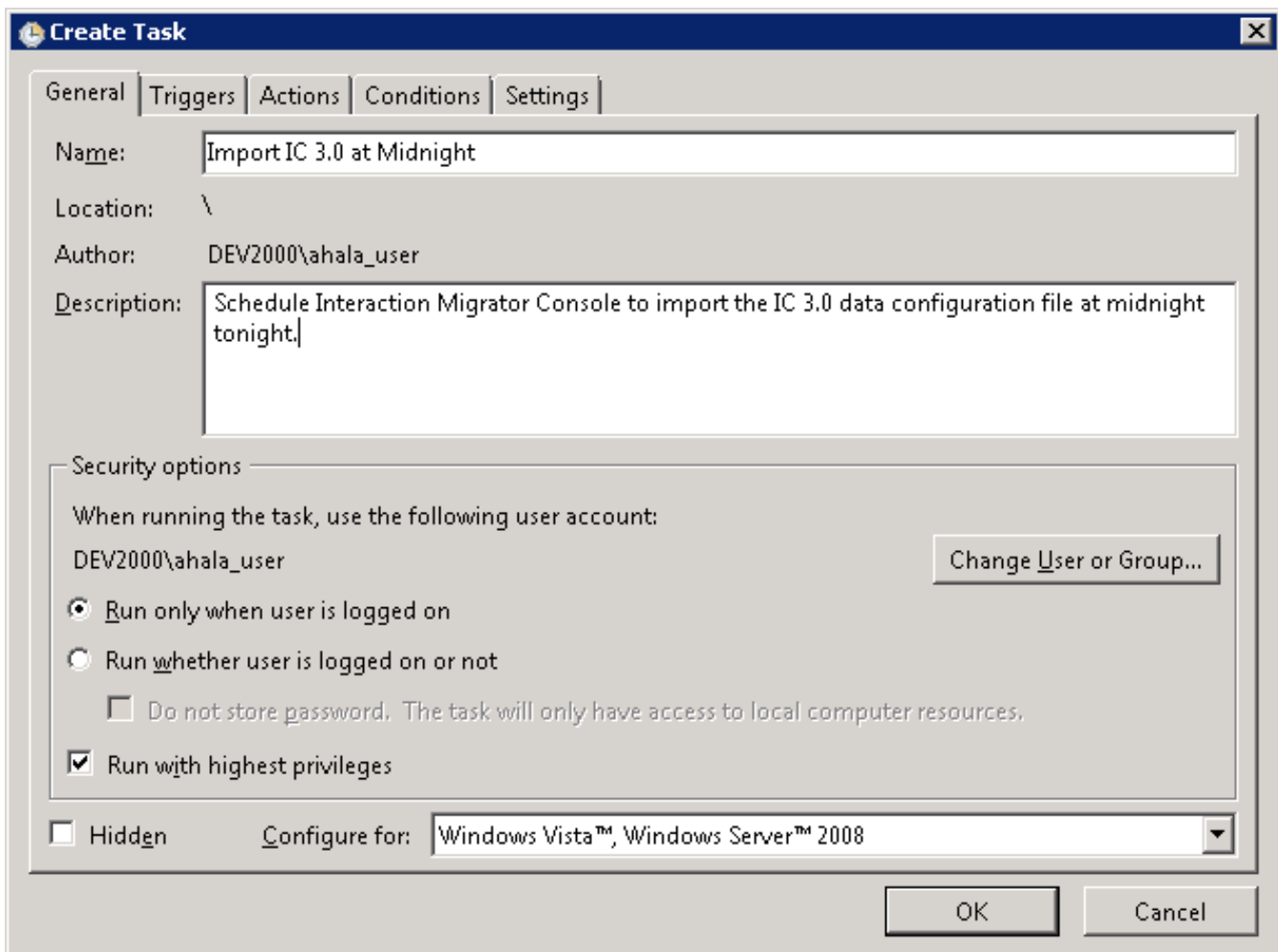
Partners and customers can use Interaction Migrator Console to automate and customize the export and import of CIC server and Interaction Media Server configuration data.

## Before Running Interaction Migrator Console

Before you run Interaction Migrator Console:

- When running Interaction Migrator Console to **export** data as part of your migration or recovery scenario, **you don't have to stop the CIC Service**. However, keep in mind that the export process is processor-intensive and can cause issues on a running production system. Run Interaction Migrator Console when system usage is at the absolute lowest point.
- When running Interaction Migrator Console to **import** data as part of your migration or recovery scenario, **you must restart the CIC Service** after the import to implement the changes.

## Task Scheduler for Interaction Migrator Console



## Interaction Migrator Console Command-line Options

The following table describes the command-line options for Interaction Migrator Console.



Command-line option	Description
<b>-export</b>	<b>Run Interaction Migrator in export mode.</b>
-exportNodes	A comma-delimited list of nodes to export from the server. Example: <code>exportNodes="IP Phones, Lines"</code> . To export all the data, set this parameter to <code>'all'</code> .
-customHandlerPath	Full path to the location of the custom handlers for the system.
-exportFolder	Full path to where to create the export file.
-password	To assign a password to the CIC or Interaction Media Server configuration data file, provide a value for this parameter. If you don't require a password, disregard this option.
-noprompt	By default, the console prompts for a keystroke to continue. To begin the export process with no user interaction, use this option. If you use this option, Interaction Migrator skips the Dialer package creator.
<b>-import</b>	<b>Run Interaction Migrator in import mode.</b>
-importfile	Name and full path of file to import. This file has an <code>.ininmigr</code> extension. If there are spaces in the file path, enclose the value in double quotes.
-importNodes	A comma-delimited list of the nodes to import from the CIC or Interaction Media Server configuration data file. To import everything that is in the file, set this value to <code>'all'</code> .
-extractionfolder	Full path to where to extract the import files to.
-password	If the import file has a password, use this parameter. If not, disregard this option.
-importmode	If running in Migration mode, set this parameter to 0. If running in Recovery mode, set this value to 1.
-noprompt	By default the console prompts for a keystroke to continue. To begin the import process with no user interaction, use this option. If you use this option, Interaction Migrator skips the Dialer package creator.
-devMode	If migrating Interaction Recorder to a development environment, use this option to prevent the import of the Recordings Rescue ID attribute key. If not, disregard this option.

## Interaction Migrator Console Example Configurations

Following are example configurations for Interaction Migrator Console.

### Export all nodes with no user interaction (with password)

```
ININ.Migrator.Console -export -exportfolder="d:\temp" -exportNodes="all" -
customHandlerPath="d:\customHandlers" -password=foo noprompt
```

### Export users and workgroups

```
ININ.Migrator.Console -export -exportfolder="d:\temp" -exportNodes="users,workgroups" -
customHandlerPath="d:\customHandlers" noprompt
```

### Import all nodes from export file (with password)

```
ININ.Migrator.Console -import -importfile="d:\temp\foo_030320071919.ininmigr" -importNodes="all" -
extractionFolder="d:\Temp\MyImportFolder" -password="1234" noprompt
```

# Third Server Disaster Recovery Site Scenario

Scenarios where a Switchover pair exists at a primary site, with a third backup server at a Disaster Recovery (DR) site are becoming more common. You can use Interaction Migrator in a *third server disaster recovery site* scenario in an automated fashion to back up the configuration of one of the servers in the Switchover pair to the remote DR site.

**Note:** If the DR server has a different server name than either of the CIC servers in the Switchover pair, use Interaction Migrator's Migration mode instead of Recovery mode.

Following are the steps for this scenario.

## Implementation/Testing Phase

1. Set up server completely, short of importing configuration.
2. Image Server. Call this Image1.
3. Import newest Migrator Data and test.

If anything does not test correctly and requires a configuration change that should have been in Image1, do the following:

1. Restore CoreImage.
2. Change configuration.
3. Make new CoreImage.
4. Import Migrator Data again and retest.
5. Complete cycle until CoreImage works fine.

**Note:** CoreImage contains no configuration. It is **ready** for you to apply configuration.

## Maintenance Phase

1. Record all changes to production servers that need changed on the DR server.
2. On a scheduled interval:
  - a. Take list of items proven in production not to cause issues as a task list.
  - b. Back up CoreImage to CoreImage\_<date>.  
If something goes wrong, you have a great audit trail of past task lists that you applied (keep those lists for long-term tracking) and you can go back to an older CoreImage:
  - c. Restore CoreImage.
  - d. Apply task list.
  - e. Make new image to replace CoreImage (remember, you backed it up before this step).
  - f. Import newest Migrator Data.

If something does not test correctly and requires a configuration change that should have been in Image1, do the following:

1. Restore new CoreImage made in step (e).
2. Change the configuration.
3. Make a new CoreImage to replace the one made in step (e).
4. Import Migrator Data again and retest.
5. Complete cycle until CoreImage works fine.

## Disaster recovery plan

1. Examine the list of production changes since updating the last image to create a task list. You can implement all or any of these changes. Examine each as a "potential issues" list.
2. Restore CoreImage.
3. Apply anything from the task list that you need.
4. Import newest Migrator Data and test.

# Change log

The following table lists the changes to the *CIC Migration Guide: Installation and Configuration Guide* since its initial availability.

Date	Changes
16-April-2008	Copyright and branding updates.
17-April-2008	In "About Interaction Migrator", added section called "How Interaction Migrator handles CIC configuration data in an import".
17-April-2008	In "Migrations", made minor updates to "CIC data migration guidelines", "Telephony configuration", and "Interaction Attendant".
17-April-2008	Added Appendix A: "When to use Interaction Migrator – Sample scenarios".
08-October-2008	In the "Interaction Migrator Console" section, made correction in first paragraph to the CIC server directory location of Interaction Migrator Console.
31-August-2009	<ul style="list-style-type: none"> <li>• In the "In Migration mode only" section, expanded the Server Parameters item to explain the steps that the admin must take following the server parameters import.</li> <li>• Updated copyright information.</li> </ul>
20-January-2010	<ul style="list-style-type: none"> <li>• In the "Interaction Migrator updates" section in "Introduction", updated info for CIC 3.0 that starting with CIC 3.0 SU7, the Interaction Migrator install is updated with each CIC 3.0 SU, and that when you apply the latest CIC 3.0 SU, that you must uninstall the current version and install the latest version.</li> <li>• In the "Install Interaction Migrator" section, updated the screen capture of the Interaction Migrator download page on the PureConnect Customer Care site.</li> <li>• Replaced the "Third server disaster recovery site" site section in "Appendix A: When to use Interaction Migrator – Sample scenarios with an updated scenario". Also noted that if the disaster recovery server has a different server name than either of the CIC servers in the Switchover pair, to use Migration mode instead of recovery mode.</li> <li>• Updated copyright information and PureConnect Customer Care site URLs.</li> </ul>
05-March-2010	In the "Import CIC data" section in "Run Interaction Migrator to export/import CIC data", added a note that in order to import AdminConfig components, you must also import either Users or Workstations components.
08-April-2010	Added a "Special notices" section to explain a couple of requirements for running an Interaction Migrator import in: <ul style="list-style-type: none"> <li>• The "Import CIC data" section in "Run Interaction Migrator to export/import CIC data".</li> <li>• The "Interaction Migrator Console" section.</li> </ul>
23-August-2011	In the "Interaction Migrator Console" section, under "Command line options", updated exportNodes option description.
23-August-2011	In the "Migrations" section, added a section "Queue/IVR interval values".
23-August-2011	In the "About Interaction Migrator" section, added a section "Structured Parameters".
15-November-2012	Revised the document for CIC 4.0 and Interaction Migrator 4.0 to accommodate the CIC 2.4/IC 3.0 to CIC 4.0 Migration Package release.
10-April-2014	Updated the "CIC Service" section in "About Interaction Migrator" and "Run Interaction Migrator to export/import CIC data" to address switchover pairs.
03-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 PureConnect Product Information site URLs, and copyright and trademark information.
19-February-2015	Updated "Requirements" section for CIC 3.0 to include Microsoft .Net Framework 4.0.
31-March-2015	Updated Copyright and Trademark information
02-October-2015	Updated title page for rebranding. Updated copyright and trademark information.

16-October-2015	Updated requirements for 2015 R1 or later to Microsoft .NET Framework 4.5.2
11-January-2016	<ul style="list-style-type: none"> <li>Updated "Export CIC data" procedure to indicate that when you export users, you must also export workgroups so that the workgroup memberships are exported.</li> <li>Updated Copyright and Trademark information.</li> </ul>
17-February-2016	Updated "Command-line options" section to include devMode option.
27-April-2016	Updated <code>-noprompt</code> options in the Command-line section.
04-October-2016	Updated "Install Interaction Migrator" and "Run Interaction Migrator to Export/Import CIC Configuration Data" sections to explain the appropriate version of Interaction Migrator to download and install instead of always installing the "latest" version.
11-July-2017	Updated Microsoft .NET Framework 4.5.2 requirement to Microsoft .NET Framework 4.5.2 or later. Updated copyright and trademark information.
21-September-2017	Rebranded to Genesys.
09-January-2018	In the CIC Migration mode only section, added information indicating that when importing IP tables, Interaction Migrator appends <code>_migrated</code> to the original IP table names before updating them.
20-March-2018	Update document format.
04-June-2018	Added Microsoft .NET Framework 4.7 or later software requirement for PureConnect 2018 R4 or later.
23-April-2019	Reorganized the content only, which included combining some topics and deleting others that just had an introductory sentence such as, "In this section..."
07-May-2019	Removed "New CIC Distribution Model" as the model is no longer new.
24-April-2020	Update or remove links to "my.inin.com" as appropriate.
03-June-2020	Removed references to the <i>CIC Migration Guide</i> as it is now deprecated. Most, if not all, customers have already migrated from CIC 2.4/3.0 to a later release.
24-July-2020	Removed content related to migration from CIC 2.4/3.0 as Genesys no longer supports it.