



# **Interaction Dialer**

## **Installation and Configuration Guide**

2018 R4

Last updated June 6, 2018  
(See Change Log for summary of changes.)

### **Abstract**

This document explains how to install Interaction Dialer. Interaction Dialer is a set of client/server extensions that add predictive dialing and campaign management capabilities to the PureConnect platform.

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# Introduction

Interaction Dialer is a set of client/server extensions that add automated calling, predictive dialing, and campaign management features to the Customer Interaction Center (CIC) platform. This document explains how to convert CIC servers to Dialer servers, how to set up a Central Campaign Server, and how to install client software.

Interaction Dialer is designed to provide an efficient automated dialing system. In response to industry needs, Dialer offers a manual calling feature that disables its automatic dialing capabilities. When manual calling is used, the system becomes a Manual Calling Server (MCS), since it can only make manual calls.

You choose how you want Interaction Dialer to work, either as an automatic dialing system or a manual-only calling system, by installing the appropriate license. For details see [MCS Considerations](#) and [Licenses used by Dialer and Scripter](#) in this document.

**Note:** Installation procedures and documentation refer to Interaction Dialer server as *Outbound Dialer Server* or *ODS*. The actual way that the server will work, either as a fully automated dialing system or as a manual-only calling system, will not be determined until after you load the license. As such, the installation procedure is the same regardless of how the Dialer server will operate after the license is installed.

## What to Read First

Please read this document carefully before installing software. For information about new features in Interaction Dialer, refer to the PureConnect *Release Notes* in the [PureConnect Documentation Library](#).

## Version Considerations

Starting with the 2015 R1 version, Interaction Dialer and Customer Interaction Center (CIC) are on the same build and release schedule. Since Dialer runs on top of CIC, a few special considerations apply if you are migrating from a Dialer 4 release.

### Dialer Server (ODS/MCS)

The Dialer server and the CIC server must be the same version. This means that the Dialer server component of Dialer 2018 R4 can only be installed on a CIC server running CIC 2018 R4. Therefore, before you install the Dialer 2018 R4 server, you must first update the CIC server to CIC 2018 R4. If you do not first update the CIC Server, Dialer will not install.

### Central Campaign Server (CCS)

The CCS component of Dialer 2018 R4 is designed to be backward compatible with older ODS/MCS versions *ONLY* during the upgrade procedure. This means that you can install the Dialer 2018 R4 CCS on a server and it will be able to *temporarily* function with a previous version of the Dialer ODS/MCS during the upgrade procedure. Once you have the Dialer 2018 R4 CCS up and running, you should *immediately* upgrade the CIC server to CIC 2018 R4 and then the ODS component to Dialer 2018 R4.

Under no circumstances should you run differing versions of Dialer between the ODS and CCS in a production environment.

### Workstation/Client/Off-Server Components

Existing versions of workstation, client, and off-server components related to Dialer are designed to be backward compatible with Dialer 2018 R4 *ONLY* during the upgrade procedure. This means that you can upgrade to Dialer 2018 R4 and expect that older versions of Dialer Plug-ins, Scripter .NET Client, and ICBM views will function normally during the upgrade procedure. You should then upgrade those systems to their 2018 R4 counterparts as soon as possible to ensure the best performance and to avoid any unnecessary problems.

## Interaction Scripter

Interaction Scripter has several nuances of meaning. *Interaction Scripter API* is a set of JavaScript extensions that web developers use to create custom scripts for outbound campaigns. Agents view custom scripts in *Interaction Scripter .NET Client*. Interaction Dialer supports a second type of scripts, called base scripts. Base scripts are created in Interaction Administrator. Agents can view base scripts in Interaction Scripter .NET Client or Interaction Connect. When Interaction Connect is used, its user interface for scripts is called *Scripter in Interaction Connect*.

### Scripter in Interaction Connect

To use *Scripter in Interaction Connect*, you must install 2017 R3 or later versions of Interaction Dialer, CIC, CIC Web Applications, and Session Manager. For more information about installing web applications, see [CIC Web Applications Installation and Configuration Guide](#) in the CIC Documentation Library.

## Interaction Dialer Releases

Instructions for updating existing Interaction Dialer 4.0 GA to SU 3 and Interaction Dialer 2015 R1 and later releases are provided on the Interactive Intelligence Product Information site at <https://my.inin.com/products/dialer-scripter/Pages/Latest-Release.aspx>.

### Interaction Dialer 2.4/3.0 to 2015 R1 and later migrations

Existing Interaction Dialer 2.4/3.0 systems must migrate to Interaction Dialer 2015 R1 or later as part of the CIC 2.4/3.0 to 2015 R1 or later migration process. For more information, see the following pages on the Interactive Intelligence Product Information site:

- **Interaction Dialer/Scripter Release Information**  
<https://my.inin.com/products/dialer-scripter/Pages/Release-Information.aspx>
- **CIC 2.4/3.0 to CIC 2015 R1 or Later Migrations**  
<https://my.inin.com/products/cic/Pages/Migrations.aspx>.

## License Prerequisites

Before installing or upgrading Interaction Dialer, you must update the license file of each CIC server that will be configured as a Dialer server. See [Server License Prerequisites](#) in this document.

Starting with the 2015 R1 version, Interaction Dialer and CIC are now on the same release schedule and the versions must match. As such, Interaction Dialer ODS 2018 R4 can only be installed on a server running CIC 2018 R4.

## Audience

Several people in an organization may share responsibility for different aspects of Dialer implementation and administration. This document is written for *Certified Technical Implementers* who configure server hardware and install software components. See [Administrative Roles](#) in this document.

## Client/Server Device Prerequisites

Guidelines in installation procedures summarize hardware and software prerequisites that must be in place before you can install the Dialer component. Do not install Dialer components until the destination device is set up appropriately to meet Dialer's pre-installation requirements. In some cases, you must install software from another vendor. It is assumed that you can consult third-party documentation as needed.

## Domain Credentials

You must know how to log in using the **IC Administrator account**. Dialer servers use the Notifier protocol to communicate with the Central Campaign Server. The security of IP connections is authenticated using the login ID that was in effect during installation of the Central Campaign Server. The user ID associated with the IC service on Dialer servers must match the ID associated with the Central Campaign Server. Otherwise authentication will fail and Interaction Dialer will not start.

For this reason, you must login as the IC Administrator before setting up the Central Campaign server or a Dialer server. The Dialer server and CCS software must be installed by the same domain user, and the Dialer Server and CCS must be on a domain.

## Administrative Roles

Several persons typically share responsibility for different aspects of Dialer implementation and administration. The key roles are identified below.

**Certified Technical Implementers** install and configure Interaction Dialer's client/server hardware and software components. This person installs Interaction Dialer, and may set up the first IC server in an organization. A Certified Technical Implementer assembles and configures server and telephony hardware. He or she installs required operating system software, drivers, databases, and network protocols. To receive technical support, Certified Technical Implementers have attended and passed core courses covering the Interaction Center Platform and Interaction Dialer. In many cases, the person who installs and configures Interaction Center servers for an organization is the appropriate resource for Interaction Dialer implementations. This person could also work for a reseller or other professional services organization.

**Call Center Supervisors** monitor campaigns, assist call center agents, and run reports. Persons in this central role use **Interaction Administrator** to define campaigns, stages, and zones, stages, rules, and schedules. They use **Interaction Dialer** views in **Interaction Center Business Manager** to monitor campaigns. The Call Center Supervisor knows the specific goals of each campaign. This person works with all other team members to define campaigns, manage campaign data, and to coordinate details.

**Web Page Designers** develop HTML pages that guide agents through stages of campaign calls. Web Page Designers use **Interaction Scripter .NET Client** (licensed separately) to develop custom campaign scripts. Interaction Dialer includes a set of base scripts that are sufficient for basic tasks. To use Interaction Dialer, call centers don't have to develop custom scripts. Persons without special web development expertise can even customize the base scripts to add additional database fields.

However, many call centers require sophisticated interactions that mix agent dialog with forms-based data entry and complex navigational aids. Interaction Scripter .NET Client provides script language extensions that Web Page Designers can use to meet any conceivable campaign requirement.

Web Page Designers work closely with Call Center Supervisors and Database Administrators. Call Center Supervisors provide Web Page Designers with the narrative that agents read to customers, with logical branching paths that agents will use to navigate through a call, numbers assigned to stages in the campaign, and custom database fields that must be updated when forms are filled out.

Web Page Designers need to be thoroughly grounded in web page design, HTML, scripting languages (especially JavaScript), and must have moderate database expertise.

Starting with Dialer 2017 R3, you can use base script with Scripter in Interaction Connect.

**Database Administrators** manage campaign databases. Persons in this role have strong SQL Server or Oracle DBMS expertise. They are responsible for working with other team members to implement custom corporate data stores with campaign databases. This person is responsible for the content and schema of Contact List and other campaign-related tables. He or she monitors campaign databases to ensure data integrity, backup essential files, and to optimize performance, and helps manage ODBC and UDL connections.

Please visit the Interactive Intelligence web site (<http://www.ININ.com/education>) for more information about certification programs and training courses.

## How Dialer installation changes IC roles for Administrator, Supervisor and Agent

Interaction Dialer installation modifies three IC roles so that they can be assigned to Dialer system administrators, call center supervisors, and Dialer agents. You can manage the access control and security rights for each role in Interaction Administrator. The following table lists the access control and security rights that the Interaction Dialer installation assigns each IC role by default:

	Agent	Supervisor	Administrator
Login Campaign	✓		
View Dialer Supervisor Views		✓	
View Dialer Campaign List		✓	
Modify Dialer Campaign List		✓	
View Change Auditing			✓
Modify Change Auditing			✓
View Configuration General			✓
Modify Configuration General			✓
View HTTP Server			✓
Modify HTTP Server			✓
View Dialer Servers			✓
Modify Dialer Servers			✓
View Phone Number Types			✓
Modify Phone Number Types			✓
View Preview Call Behavior			✓
Modify Preview Call Behavior			✓
View Dialer Campaign List			✓
Modify Dialer Campaign List			✓



## Obtaining Dialer Installs

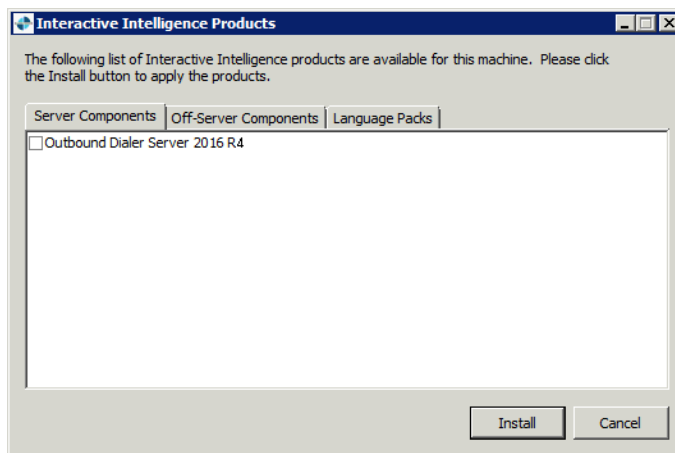
Starting with Dialer 2015 R1, the Interaction Dialer installation package is available as an .iso file that you can download from the Interactive Intelligence Product Information site at <https://my.iinin.com/products/Pages/Downloads.aspx>.

Once you have a copy of the .iso file, you can burn it to a DVD or mount it and access its contents. If you explore the contents, you'll find that each of the Dialer components is available as an .msi file, which is a self-contained Windows Installer Package. This allows you to copy individual components' .msi file to an appropriate server and double-click to launch the installation procedure.

You'll also find an Install.exe file, which when run will display the Interactive Intelligence Products user interface for Interaction Dialer. From this tabbed user interface, you can find and launch each of the Dialer component's Windows Installer Packages.

## Install User Interface

When you run the Install.exe file, the Interactive Intelligence Products screen appears.



**Note:** Interaction Dialer uses a single installation procedure to install the Dialer server, which is by default referred to as an Outbound Dialer Server. However, the functionality of the Dialer server will not be determined until the appropriate license, Outbound Dialer Server (ODS) or a Manual Calling Server (MCS) is installed.

The user interface employs tabs to organize the various components. For 2018 R4, you'll find the tabs contain the components described in the following table.

Tab	Components
Server Components	Outbound Dialer Server 2018 R4
Off-Server Components	Central Campaign Server 2018 R4 Dialer Developer 2018 R4 Dialer Plug-ins for IC Session Manager Server 2018 R4
Language Packs	German Dialer Server Components 2018 R4 Spanish Dialer Server Components 2018 R4 French Dialer Server Components 2018 R4 Japanese Dialer Server Components 2018 R4 Dutch Dialer Server Components 2018 R4 Polish Dialer Server Components 2018 R4 Portuguese Dialer Server Components 2018 R4 Simplified Chinese Dialer Server Components 2018 R4

To install a component from the Interactive Intelligence Products screen, select the check box and click the Install button.

**Note:** The directory structure in which the individual .msi files are stored mirrors the tab layout of the Interactive Intelligence Products screen. For example, you'll find the Dialer Developer 2018 R4.msi file in the Off-Server Components directory.

# Central Campaign Server Installation Overview

This topic lists tasks performed to install or upgrade Central Campaign Server (CCS) components on dedicated server hardware. A CCS provides a Dialer server (Outbound Dialer Server/ODS or Manual Calling Server/MCS) with campaign configurations, control messages, statistics, and call list data as well as accepting results from dialing.

To proceed, perform the tasks for your installation scenario:

## Dialer 2018 R4 New Installation

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1. Read and comply with [CCS hardware and software requirements](#) to ensure that the server is ready to accept Interaction Dialer software.
2. Run the [Central Campaign Server \(CCS\)](#) install.
3. [Install Interactive Update Client](#) on the CCS.
4. [Create a UDL file](#) that Interaction Dialer needs to work cooperatively with your company's database management system.

## Domain Credentials

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Before running the CCS setup, you must log in using the IC Administrator account. Outbound Dialer servers use Notifier protocol to communicate with the Central Campaign server and the security of IP connections is authenticated using the login Id that was in effect during installation of the Central Campaign server. Thus, the user ID associated with the IC service on Outbound Dialer servers must match the ID associated with the Central Campaign server. Otherwise authentication will fail and Interaction Dialer will not start.

For this reason, you must login as the IC Administrator before setting up the Central Campaign server or an Outbound Dialer server. The ODS and CCS software must be installed by the same domain user, and the ODS and CCS must be on a domain.

## CCS Hardware and Software Requirements

The Central Campaign Server (CCS) requires dedicated server hardware. Its components cannot be installed on a CIC server. While the CCS and DBMS can reside on the same physical server, it may not be practical for all situations. (See CCS setup installs the Campaign Server process and the UpdateServer process. When a new install is performed, it initializes the default campaign configurations file (dialer\_config.xml).

### Hardware Requirements

The hardware requirement for a Central Campaign Server is not fixed. As a rule of thumb, it should have at least 1 GB of RAM memory. If the CCS is also the database server, you should comply with the hardware recommended for your database system. In general, memory is more important than raw processing power, although a recent-generation microprocessor is recommended. Multi-core processor configurations may be appropriate for high volume call centers with large databases.

### Software Requirements

Make sure that the following are installed on the server that will run the Central Campaign Server.

1. A Microsoft Windows Operating System from this list of supported versions:
  - **Microsoft Windows Server 2016 (64-bit)**  
Supported in PureConnect 2018 R2 and later
  - **Microsoft Windows Server 2012 R2 (64-bit)**  
Supported in CIC 2015 R1 and later  
Download and apply Microsoft KB article 2919355
2. **Microsoft .NET Framework 4.7 or later**  
Required for PureConnect 2018 R4 and later  
Windows 2016 and Windows 2012 R2: If not installed via Windows Update, install from \ThirdPartyInstalls on the CIC 2018 R4 or later .iso
3. Microsoft SQL Server 2008 R2 Native Client

### DBMS Requirements

Interaction Dialer supports the same databases and database versions as CIC.

Vendor	DBMS Version
Microsoft	SQL Server 2016 SQL Server 2014 SQL Server 2012 SQL Server 2008 R2 (64-bit) SQL Server 2008 R2 (32-bit)
Oracle Database	12c 12.1.0.1.0 (64 bit) 11g R2 11.2.0.4.0 (64-bit) 11g R2 11.2.0.3.0 (64-bit) 11g R2 11.2.0.1.0 (64-bit) 11g R2 11.2.0.1.0 (32-bit)

For more information about the supported the DBMS server versions, visit the Interactive Intelligence Testlab site at <http://testlab.inin.com> and look for Database Servers in the Software column.

## General DBMS Considerations

This section contains general information about using a DBMS with Interaction Dialer.

### DBMS Hardware

In environments with a low outbound call volume, the DBMS can be installed on the same physical server as the CCS. However, it may not be practical for all situations.

- For environments that have a high call volume, having the DBMS server reside on dedicated hardware will provide better overall Dialer performance.
- For environments that employ the CCS Switchover feature, having the DBMS server reside on dedicated hardware will ensure that the backup CCS will still have access to the DBMS even if the physical server running the primary CCS goes down completely.

### Native Client

**Regardless** of whether you are using Microsoft SQL Server or Oracle Database as your DBMS system, you must install the Microsoft SQL Server 2008 R2 Native Client on the CCS.

The reason that you must install the 2008 R2 Native Client is that *DialerTranServer*, a key component in Dialer, depends on this specific version. *DialerTranServer* maintains the ODBC connection to a database server and allows database updates to be processed.

**Note:** If the Microsoft SQL Server 2008 R2 Native Client is not installed, then *DialerTranServer* will be unable to start.

To download and install the Microsoft SQL Server 2008 R2 Native Client, follow these steps:

1. Log on to the Central Campaign Server using the IC Administrator account. The IC Administrator credentials ensure you have permission to install CCS components.
2. Access the Microsoft SQL Server 2008 R2 Feature Pack page on the Microsoft Download Center. The URL is <http://www.microsoft.com/en-us/download/details.aspx?id=16978>.
3. Expand the Install Instructions panel, locate the Microsoft SQL Server 2008 R2 Native Client section, and then download the appropriate installation package.
4. Once the download is complete, launch the Microsoft Installer (MSI) file.
5. When the Installation Wizard for SQL Server 2008 R2 Native Client appears, click **Next** and work your way through the straightforward installation procedure. As you do, provide the requested information and accept the default recommendations.

## Microsoft SQL Server Considerations

If your DBMS system is a Microsoft SQL Server, there are some considerations you need to take into account.

### Command Line Utilities

Regardless of what version of Microsoft SQL Server you are using you must install the Microsoft SQL Server 2008 R2 Command Line Utilities (x64). The reason that you must install the 2008 R2 Command Line Utilities (x64) is that Dialer depends on this specific version.

You must ensure the SQL Server 2008 R2 Command Line Utilities are installed on the system that will run CCS, even if the actual DBMS is installed on a machine separate from the CCS. Furthermore, the Command Line Utilities must be installed before you run the CCS install.

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

**Note:** If the Microsoft SQL Server 2008 R2 Command Line Utilities, 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.

To download and install the Microsoft SQL Server 2008 R2 Command Line Utilities, follow these steps:

1. Log on to the Central Campaign Server using the IC Administrator account. The IC Administrator credentials ensure you have permission to install CCS components.
2. Access the Microsoft SQL Server 2008 R2 Feature Pack page on the Microsoft Download Center. The URL is <http://www.microsoft.com/en-us/download/details.aspx?id=16978>.
3. Expand the Install Instructions panel, locate the Microsoft SQL Server 2008 R2 Command Line Utilities section, and then download the appropriate installation package.
4. Once the download is complete, launch the Microsoft Installer (MSI) file.
5. When the Installation Wizard appears, click **Next** and work your way through the straightforward installation procedure. As you do, provide the requested information and accept the default recommendations.

## Oracle Database Considerations

If your DBMS system is Oracle Database, there are some considerations you need to take into account.

### Oracle 11g R2 11.2.0.1.0 (64-Bit) and the Central Campaign Server

Oracle 11g R2 11.2.0.1.0 (64-bit) users must install the Central Campaign Server on a server separate from the Oracle server. The CCS uses the Oracle Database 11g Release 2 Client 11.2.0.1.0 (32-bit) to connect to the Oracle 11g R2 (64-Bit) database server; however, the Oracle Database Client (32-Bit) cannot be installed on an Oracle (64-Bit) server.

### Oracle Application Express (APEX)

Starting with Interaction Dialer 2016 R4, Oracle Application Express (APEX) must be installed on the Oracle Database before you can use Dialer with Oracle.

### Use the 32-bit version of the Microsoft Data Link Properties to edit the UDL file

1. Install the CCS on a separate Microsoft Windows Server server.
2. Install Oracle Database 11g Release 2 Client 11.2.0.1.0 (32-bit).
3. Configure the Local Net Service Name via the Oracle Net Configuration Assistant.
4. [Create the UDL file.](#)
5. Use the following command line utility to open the 32-bit version of the Microsoft Data Link Properties and edit the UDL file:

```
C:\Windows\systow64\rundll32.exe "C:\Program Files (x86)\Common Files\System\Ole
DB\oledb32.dll",OpenDSLFile D:\I3\IC\Server\UDL\oracle.udl
```

**Note:** The default Microsoft Data Link Properties utility (64-bit) cannot see the Oracle Provider for OLE DB Provider (32-bit) unless you use this utility.

### Oracle Database Utilities

The Oracle Database Utilities, which are included with the Oracle Client Installer, are required for Dialer when using an Oracle database. The Oracle Database Utilities are available as a download as part of the Oracle Database 11g Release 2 Client (11.2.0.1.0) for Microsoft Windows (32-bit).

To install Oracle Database Utilities:

1. From your browser, go to the Oracle Database 11g Release 2 Client Downloads page at <http://www.oracle.com/technetwork/database/enterprise-edition/downloads/112010-win32soft-098987.html>.
2. Locate and select the Accept License Agreement.
3. In the Oracle Database 11g Release 2 Client (11.2.0.1.0) for Microsoft Windows (32-bit) section, download and unzip the win32\_11gR2\_client.zip file to the appropriate destination on your machine.
4. Open the Client folder and run Setup.exe.
5. When the Select Installation Type screen appears, select **Custom** and click **Next**.
6. Select any additional languages in which you want your product to run and then specify the installation location.
7. When Available Product Components screen appears, select the **Oracle Database Utilities** check box and click **Next**.
8. At this point, work your way through the rest of the straightforward installation procedure. As you do, provide the requested information and accept the default recommendations.

### Required Database Credentials

Once the database server is set up, be sure to define a database user account that will service the Dialer tables. This user needs privileges to create, delete, modify, add indexes, insert records and update records on Dialer tables. The user should have the ability to execute Dialer stored procedures, and the ability to drop and create

triggers. This user's Login Name and Password will be specified later when a UDL connection to the database is defined later.

### Oracle Privileges Required for Dialer

The Dialer database houses the contact lists, scheduled calls, and recycle tables. You can use the IC database for the Dialer database, or you can choose to use a separate database. The Dialer database requires specific Oracle privileges to prevent permission issues. Manually set the following Oracle 11g privileges as required:

System Privileges	Object Privileges
CREATE SESSION CREATE TABLE CREATE SEQUENCE CREATE PROCEDURE CREATE TRIGGER CREATE USER	SELECT ON SYS.PROCEDURE\$ SELECT ON DBA_OBJECTS

In addition, Dialer user accounts require specific privileges, set automatically in the IC Database when you run IC Setup Assistant, to ensure users can create, update, or run SPROCs, tables, etc. The Oracle 11g privileges required for Dialer and CIC follow.

EIC_WRITE Role	EIC_READ role	ININ_DIALER_40 user
Grant SELECT, INSERT, UPDATE, DELETE on all ININ_DIALER_40 tables  Grant EXECUTE permission on all ININ_DIALER_40 procedures	Grant Select on all ININ_DIALER_40 tables	Grant unlimited tablespace to <user>  --or-- Alter user <user_name> quota unlimited on <tablespace_name>

Starting with Interaction Dialer 2016 R4, the account that runs against the Oracle Database also requires specific privileges. Execute the following commands by using a higher privileged user like SYSTEM. Replace **youruser** with the same user as in the UDL file for Oracle.

```
GRANT EXECUTE ON ININ_DIALER_40.R_KEY_VALUE TO youruser;  
GRANT EXECUTE ON ININ_DIALER_40.T_KEYVALUE_TABLE TO youruser;  
GRANT EXECUTE ON inin_dialer_40.dialer_split_key_value_set TO youruser;
```



## Install Central Campaign Server

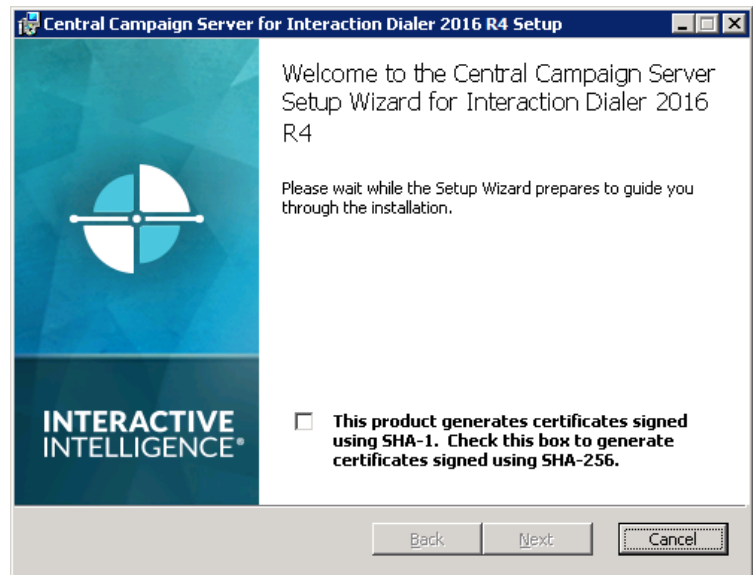
The screen caps in this procedure are out of date and will be replaced in a future update. To install the Central Campaign Server:

1. Logon to the Central Campaign Server using the IC Administrator account. The IC Administrator credentials ensure you have permission to install CCS components.
2. Do one of the following:
  - Copy the CCS\_2018\_R2.msi file to the CCS system and double click the file.
  - From the Interactive Intelligence Products interface, choose the Off-Server Components tab, select the Central Campaign Server 2018 R4 check box, and click **Install**.

3. When the Welcome to the Central Campaign Server Setup Wizard for Interaction Dialer dialog appears, you'll need to determine and choose the appropriate SHA version.

By default, CCS will use the SHA-1 certificate signature. If your CIC system is using SHA-256 certificate signature, select the SHA-256 check box.

To continue, click **Next**.

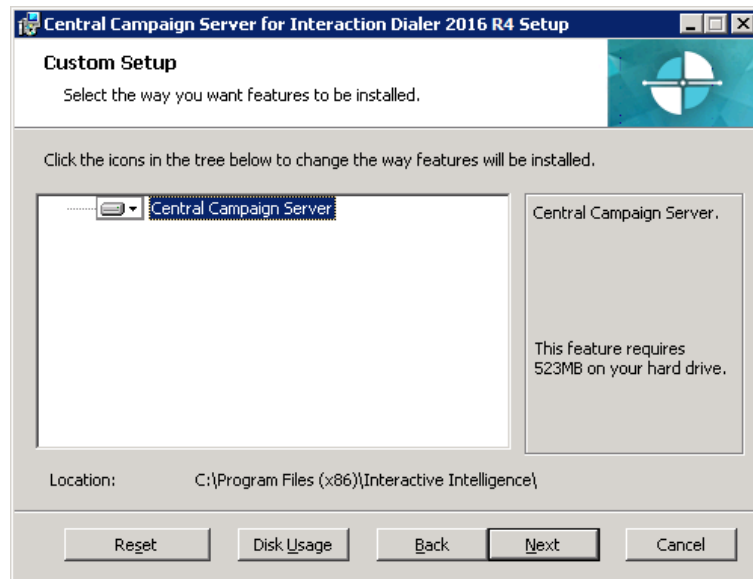


4. The Custom Setup dialog appears.

Optionally, click **Browse** to select an installation destination path different than the default path.

You can see how much hard drive space this feature will require. For more detailed information, click **Disk Usage**.

When you are ready, click **Next**.



- The Domain User Validation dialog opens and is pre-populated with account information for the logged-on user with administrator privileges.

Ensure the **User** and **Domain** fields contain the correct IC Administrator credentials and domain name to validate connection to the Central Campaign Server, type the password associated with this account, and click **Next**.

**Central Campaign Server for Interaction Dialer 2016 R4 Setup**

### Domain User Validation

Enter the user name, password and domain name.

Please enter the credentials for a user account with administrative privileges on this system. This account will register components and services to run in the context of account specified.

User:

Password:

Domain:

- The Logging File Path dialog appears.

Specify the target folder in which trace logs will be stored or keep the default directory and click **Next**.

**Central Campaign Server for Interaction Dialer 2016 R4 Setup**

### Logging File Path

Please provide the path to the desired storage folder for logging files.

Due to the significant amount of storage that logging can potentially take, a folder that is not on the Operating System or IC application partition is highly recommended.

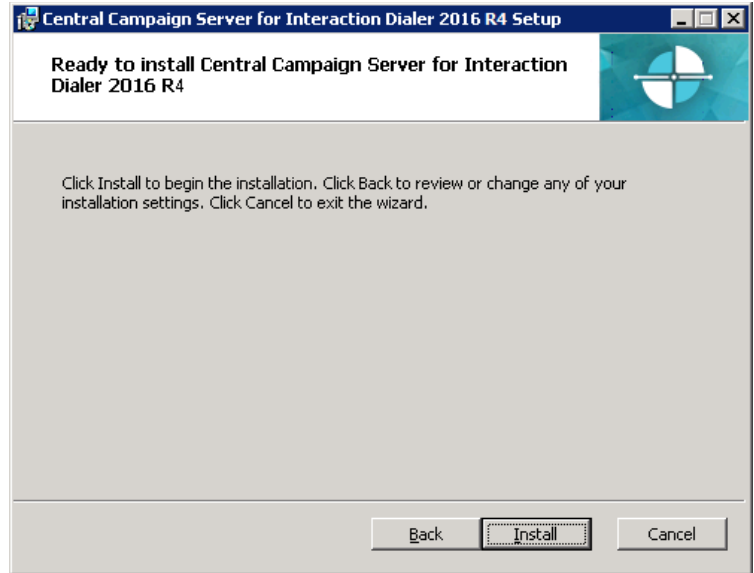
Look In:

2016-05-31

Logging Files folder:

7. The Ready to install Central Campaign Server dialog appears.

When you are ready to begin the installation, select **Install**.

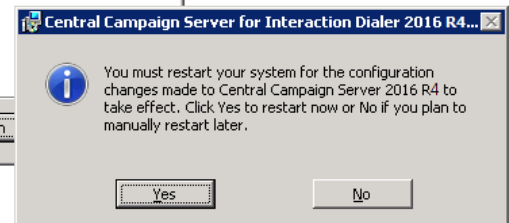


8. As the installation continues, a status bar indicates the progress.

9. When the Completed the Central Campaign Server Setup Wizard for Interaction Dialer dialog appears, click **Finish** to exit the Central Campaign Server Setup Wizard.



10. When the procedure prompts you to restart the system, click **Yes**.



## Create a UDL File

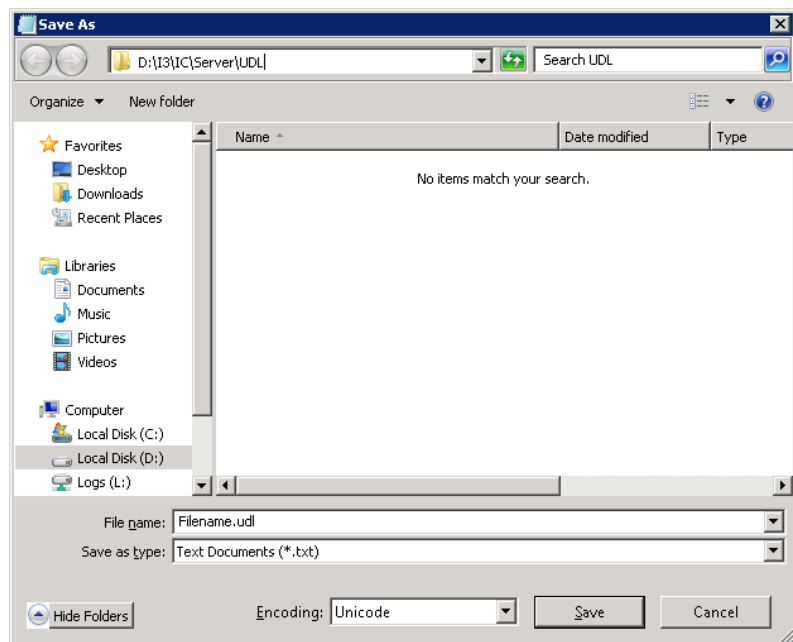
You'll create a database connection file (.UDL) using Microsoft's Data Link Properties utility to define an OLE DB data source that connects a database server with applications. You'll need to create the UDL file before adding a Dialer database connection.

### Prerequisites

- You cannot define a connection to a database that does not exist, so ensure your database administrator first creates the database.
- Oracle 11g R2 11.2.0.1.0 (64-bit) users must install the Central Campaign Server on a server separate from the Oracle server. For more information, see the [Oracle Database Considerations](#) section in this document.
- If you use Oracle DBMS, the Oracle Client installation is a prerequisite. If the Oracle Client is not installed, you cannot select the OLE DB provider for Oracle in step 6 below. You can download the client, which includes the "Oracle Database Utilities." For more information, see the [Oracle Database Considerations](#) section in this document.

### Procedure

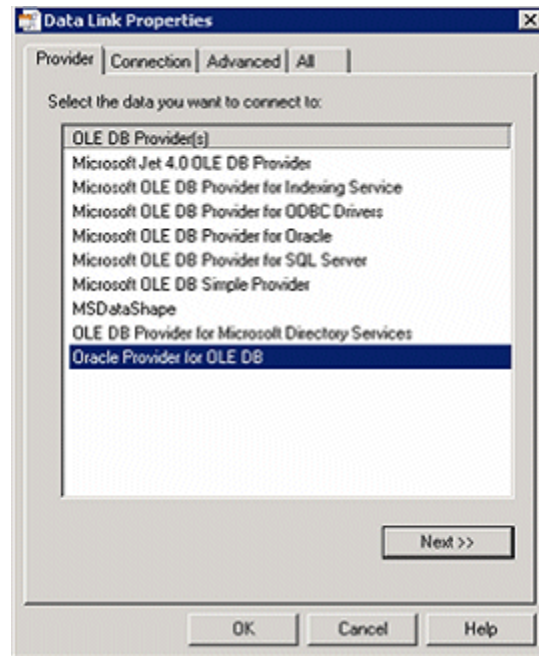
1. Open Notepad, click the File menu, and select **Save**.
2. Navigate to the UDL folder (X:\I3\IC\Server\UDL).
3. Type a name for the database connection file in the File name box. Specify **.udl** as the file extension.
4. Click **Save** and then close Notepad.



5. Using Windows Explorer, navigate to the UDL folder and double-click the .udl file to open Microsoft's Data Link Properties utility. The Connection tab is active by default.
6. Select the **Provider** tab, which lists available OLE DB service providers.

- If Microsoft SQL Server is installed, Microsoft OLE DB Provider for SQL Server is selected by default.
- If Oracle is installed, select Oracle Provider for OLE DB.

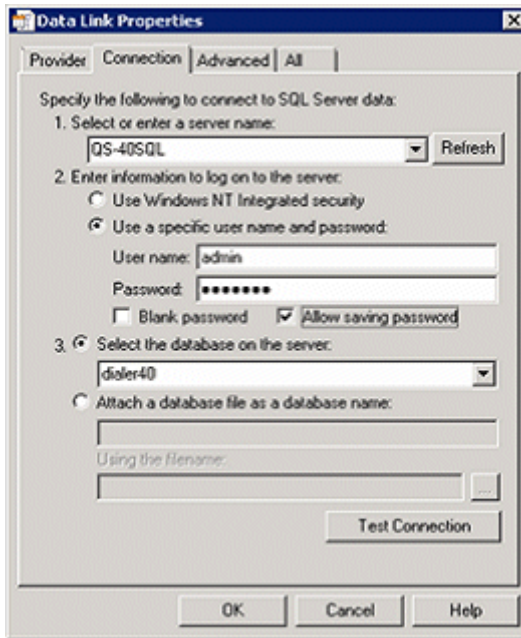
**Note:** Do not select Microsoft OLE DB Provider for Oracle. Microsoft Oracle Provider for OLE DB is listed only if the Oracle Client is installed.



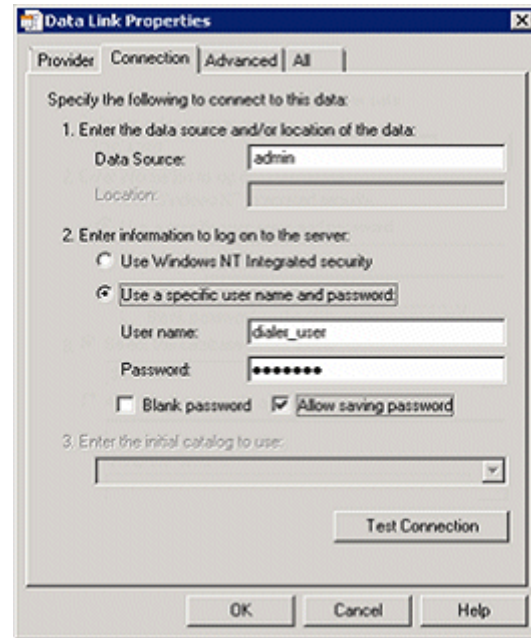
7. Click **Next** to advance to the **Connection** tab. The Connection tab associates a service provider with a specific database server. Slightly different connection options are displayed, depending on whether you selected a Microsoft or an Oracle provider.

**Note:** If you click the **Help** button at any time while this dialog is active, topics from Microsoft's help system will appear to lead you through the configuration process.

### SQL Server



### Oracle



- a. For SQL Server, in the **Server Name** field select or type the name (or IP address) of the SQL server that hosts Dialer database tables.
  - b. Select Use a specific user name and password.
  - c. Specify credentials for a user account with rights to create, delete, modify, add indexes, insert records and update records on Dialer tables. Contact your database administrator for a user account that meets these requirements.
  - d. Ensure the **Allow saving password** box contains a check mark. The password will be stored in the UDL file.
  - e. Click the arrow at the end of the **Select the database on the server** drop down list to choose the database that contains the campaign tables you wish to associate with this UDL connection.
- a. For Oracle, in the **Data Source** field type the name of the Oracle Net Service Name.
  - b. Select Use a specific user name and password.
  - c. Specify credentials for a user account with rights to create, delete, modify, add indexes, insert records and update records on Dialer tables. Contact your database administrator for a user account that meets these requirements.
  - d. Ensure the **Allow saving password** box contains a check mark. The password will be stored in the UDL file.

**Note:** In most cases you can leave settings on the Advanced tab unchanged. Options on the Advanced tab specify additional network and access permission settings, using features appropriate for the selected service provider.

8. Click **Test Connection**. If the connection works properly, the Test connection succeeded dialog appears.



9. Click **OK** to close the dialog. If a different message appears, correct your entries and try again.
10. Click **OK** to close the Data Link Properties dialog.

## Setup CCS Switchover

Interaction Dialer provides failover support for CCS servers. Keep in mind that when CCS switchover is used, it might not be practical for the DBMS to reside on the CCS server.

To install components used by CCS Switchover, perform the procedure below after installing Dialer 2018 R4 on both CCS servers that you wish to use as the switchover pair.

**Note:** For CCS switchover to work properly, ports 3952 and 3633 must be open on the firewall on both the Primary and Backup CCS.

**Note:** The Primary CCS and the Backup CCS must have the same time zone setting in Microsoft Windows. Because the evaluation of time zone sets, campaign schedules, and time-based rules occurs on the CCS, it is important that the times match to allow consistency between the Primary and Backup CCS.

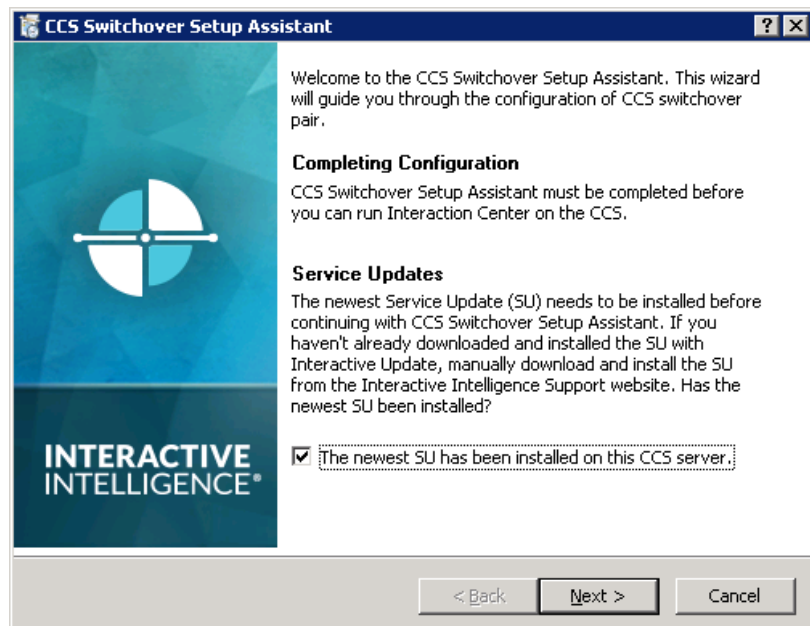
### Launch the CCS Switchover Setup Assistant

The screen caps in this procedure are out of date and will be replaced in a future update.

At a Central Campaign Server:

1. On the Start menu, access Programs > Interactive Intelligence and select the **CCS Switchover Setup Assistant** shortcut.

Select the check the box to confirm that the newest SU has been installed and click **Next**.



2. Enter the password for the IC Server Administrator account and click **Next**.

The screenshot shows a dialog box titled "CCS Switchover Setup Assistant" with the subtitle "Confirm IC Administrator Account". The main text reads: "You are logged on to this CCS Server". Below this, it shows "Administrator Account: QPERF\administrator" and "Enter Password:" followed by an empty text input field. A note at the bottom states: "The original IC Administrator account that was established with the previous Administrator Account could not be found. Please be sure to update the current IC Administrator Account with this new Administrator Account after completing this change." At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

## Configure the Primary CCS

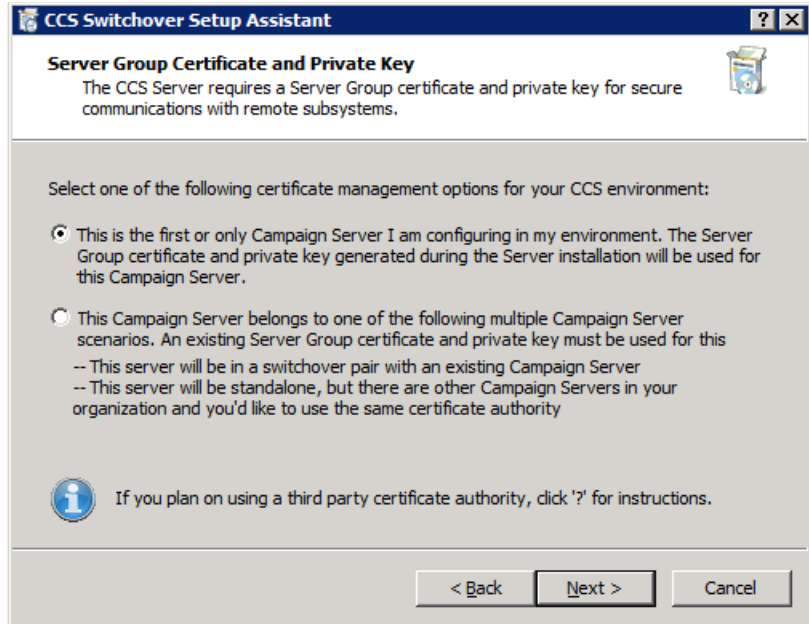
At the Primary CCS:

1. Select **Switchover A**, enter the name of the Backup CSS, and click **Next**.

The screenshot shows a dialog box titled "CCS Switchover Setup Assistant" with the subtitle "Configure Switchover Servers". The main text asks: "What role does this server perform for switchover?". Below this, it asks "Is this a switchover A or B server?". There are two radio button options: "Switchover A" (which is selected) and "Switchover B". Under "Switchover A", there is a text input field for "Name of switchover B server:" containing the text "ID\_SWITCHOVER". Under "Switchover B", there is a text input field for "Name of switchover A server:". At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

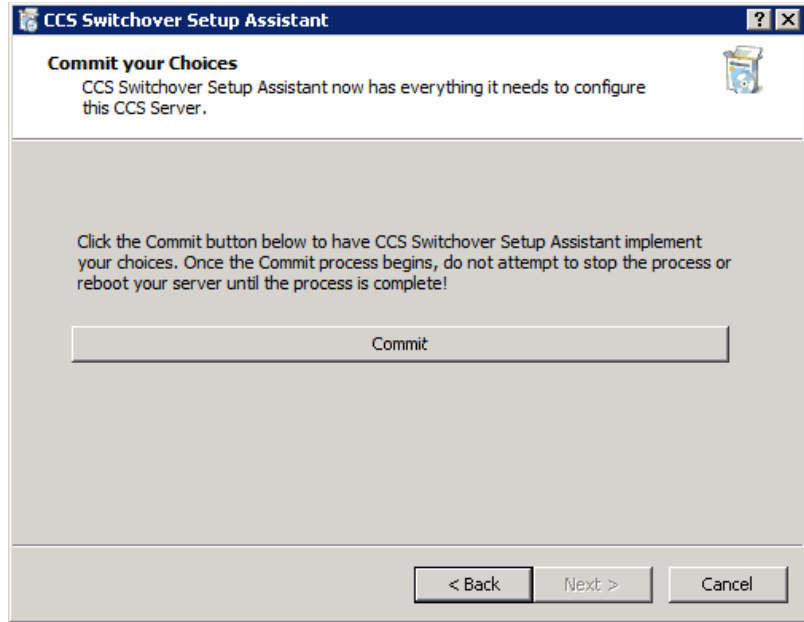


2. Select **This is the first or only Campaign Server I am configuring for my environment** and click **Next**.



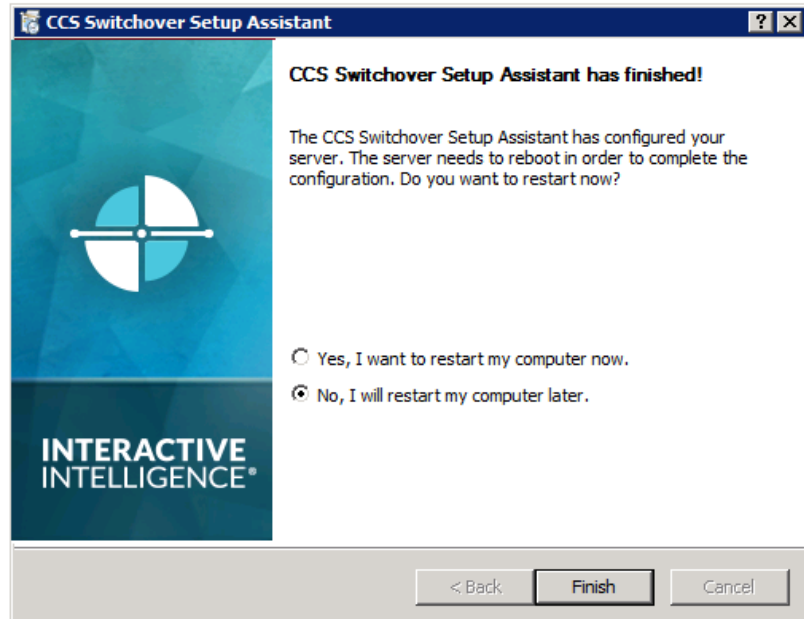
3. When you are ready, click **Commit**.

At this point, the Setup Assistant will begin a three-stage procedure that involves updating IC Components, updating the Server Group Certificate and Private Key, and renaming the Directory Services tree.



4. Wait until the process is complete and then select **No, I will restart my computer later**.

**Note:** It is important that you do **NOT** restart the Primary CCS at this point!



## Configuring the Backup CCS

At the Backup CCS:

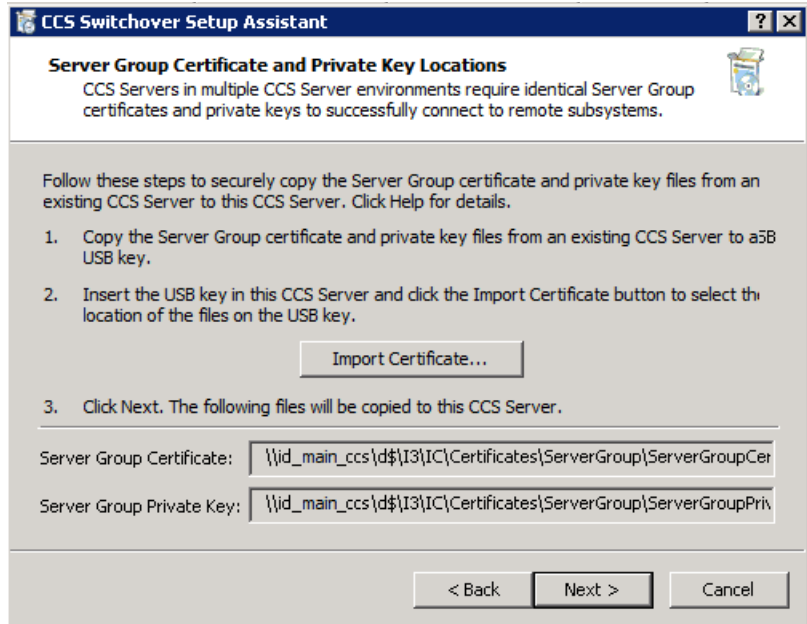
1. Repeat steps 1 & 2 in the Launching CCS Switchover Setup Assistant section above.
2. Select **Switchover B**, enter the name of the Primary CSS, and click **Next**.

The screenshot shows the 'Configure Switchover Servers' dialog box. The title bar reads 'CCS Switchover Setup Assistant'. The main heading is 'Configure Switchover Servers' with the question 'What role does this server perform for switchover?'. Below this, it asks 'Is this a switchover A or B server?'. There are two radio button options: 'Switchover A' (unselected) and 'Switchover B' (selected). Under 'Switchover A', there is a text input field for 'Name of switchover B server:'. Under 'Switchover B', there is a text input field for 'Name of switchover A server:' containing the text 'ID\_MAIN\_CCS'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

3. Select **This Campaign Server belongs to one of the following multiple Campaign Server scenarios** and click **Next**.

The screenshot shows the 'Server Group Certificate and Private Key' dialog box. The title bar reads 'CCS Switchover Setup Assistant'. The main heading is 'Server Group Certificate and Private Key' with the text 'The CCS Server requires a Server Group certificate and private key for secure communications with remote subsystems.'. Below this, it asks 'Select one of the following certificate management options for your CCS environment:'. There are two radio button options: 'This is the first or only Campaign Server I am configuring in my environment. The Server Group certificate and private key generated during the Server installation will be used for this Campaign Server.' (unselected) and 'This Campaign Server belongs to one of the following multiple Campaign Server scenarios. An existing Server Group certificate and private key must be used for this -- This server will be in a switchover pair with an existing Campaign Server -- This server will be standalone, but there are other Campaign Servers in your organization and you'd like to use the same certificate authority' (selected). At the bottom, there is an information icon (i) with the text 'If you plan on using a third party certificate authority, click '?' for instructions.'. At the very bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- Click the **Import Certificate** button.



- Use the browse buttons on the Import Certificate dialog box to access and select the following directories and files on the Primary CCS Server:

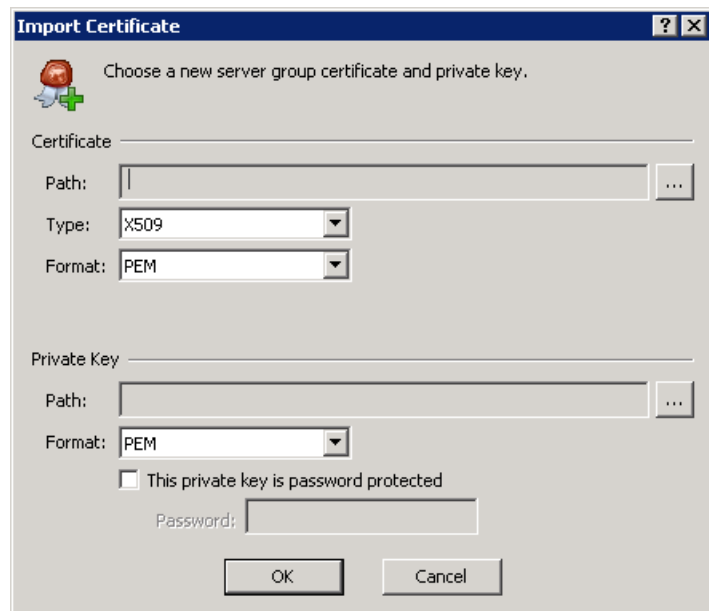
**Certificate**

... \I3\IC\Certificates\ServerGroup  
 \ ServerGroupCertificate.cer

**Private Key**

... \I3\IC\Certificates\ServerGroup  
 \ ServerGroupPrivateKey.bin

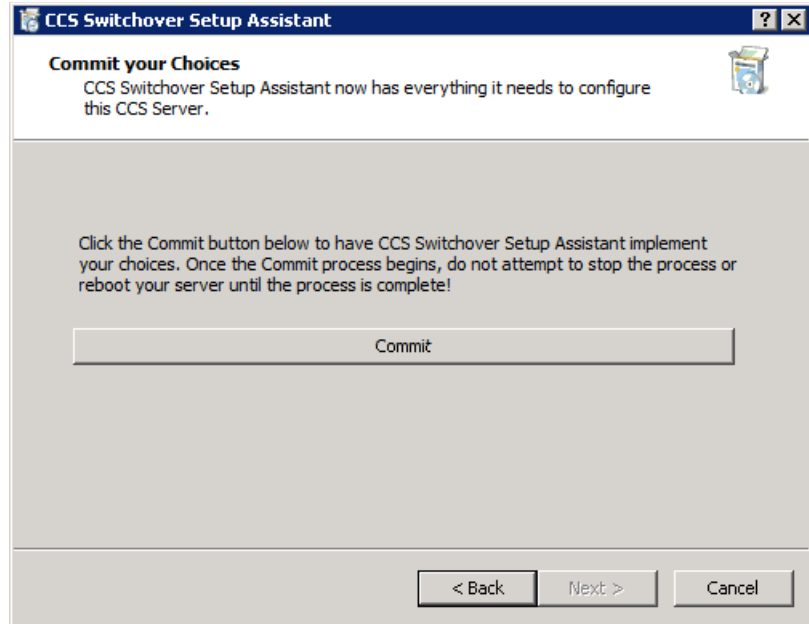
- Click **OK** to continue.



- When you return to the previous page, you will see that the Server Group Certificate and Server Group Private Key fields are filled in and can click **Next**.

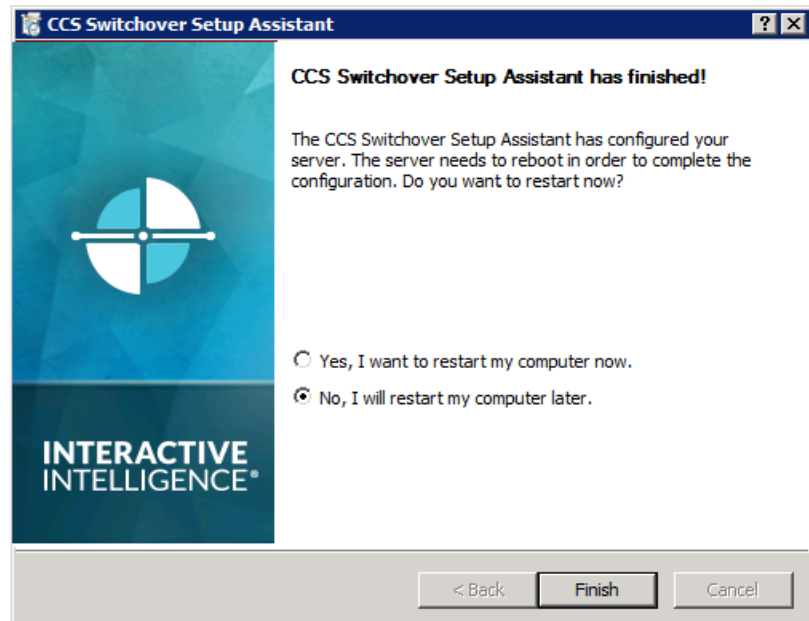
8. When you are ready, click **Commit**.

At this point, the Setup Assistant will begin three-stage procedure that involves updating IC Components, updating the Server Group Certificate and Private Key, and renaming the Directory Services tree.



9. Wait until the process is complete and then select **No, I will restart my computer later**.

**Note:** It is important that you do **NOT** restart the Backup CCS at this point!



## Restart and verify

You'll restart the Primary CCS. Then you'll restart the Backup CCS.

### At the Primary CCS:

1. Restart the server.
2. Launch Interaction Center.

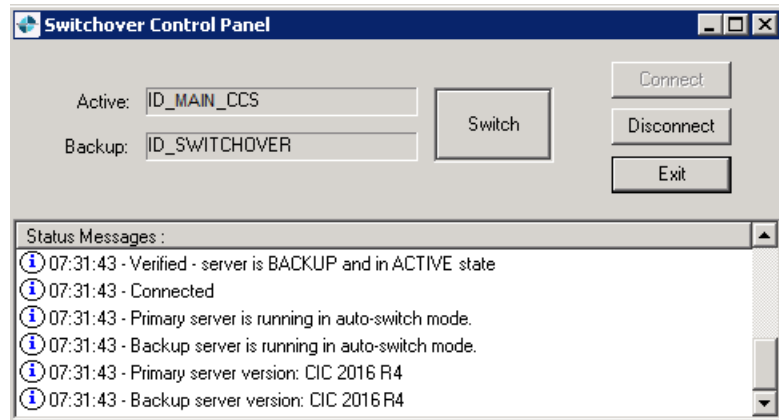
Make sure the Primary CCS has fully started before going to next step.

### At the Backup CCS:

1. Restart the server.
2. Launch Interaction Center.

Make sure the Backup CCS has fully started before going to next step.

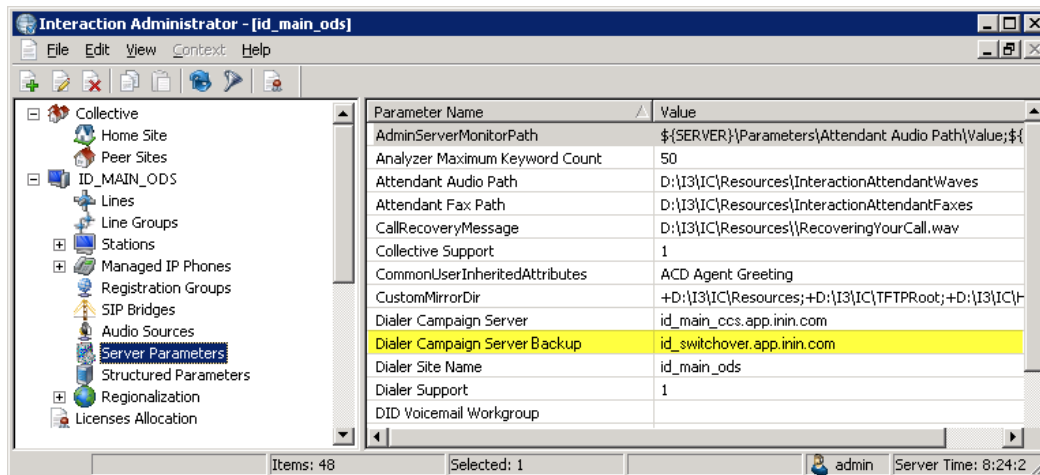
3. Once primary and backup CCS's have fully started, launch the Switchover Control Panel on either the Primary CCS or the Backup CCS and check the Status Message panel to verify that the switchover is working correctly.
4. When you are satisfied that everything is working correctly, click **Exit**.



## Verify your configuration

At the ODS:

1. Launch Interaction Administrator.
2. Locate and select the Server Parameter container.
3. Verify that the Dialer Campaign Server Backup parameter appears and that its value contains the name of your Backup CCS.



**Tip:** It is important that you document the name of the Primary CCS. Should you decide to deactivate the CCS switchover pair at a later date, you'll need to know which server was originally set up as the Primary CCS.

# Outbound Dialer Server Installation Overview

As we mentioned in the introduction, an Interaction Dialer server, which runs on top of a CIC server, can be configured to operate in one of two ways depending on which feature license you load.

- You can configure an Interaction Dialer server to perform automatic outbound dialing by loading the standard Outbound Dialer Server (ODS) license.
- You can configure an Interaction Dialer server to provide a structured mechanism for making manual outbound calls by loading the Manual Calling Server (MCS) license.

However, keep in mind that as far as the installation procedure and the installation documentation go, the Interaction Dialer server will be referred to as an *Outbound Dialer Server* or *ODS*. The actual way that the server will work, either as a fully automated dialing system or as a manual-only calling system, will not be determined until after you load the license. As such, the installation procedure is exactly the same regardless of how the Dialer server will operate after the license is installed.

## ODS Hardware and Software Requirements

### Hardware Requirements

The hardware requirements for an Outbound Dialer Server are the same as for CIC. For more detailed information, see the *CIC Installation and Configuration* section of the CIC Documentation Library at [Help.inin.com](http://Help.inin.com).

### CIC Server Prerequisite

Do not install the Interaction Dialer 2018 R4 ODS component until you have installed CIC 2018 R4.

The ODS installation procedure assumes that CIC 2018 R4 is installed and fully configured. If not, please refer to *IC Installation and Configuration Guide* for installation assistance.

### License Prerequisites

You must acquire or update a license file for each CIC server that is or will be configured as an Outbound Dialer (ODS) server. The Central Campaign Server does not require a license file. See [Server License Prerequisites](#) and [Licenses used by Dialer and Scriptor](#).

### Switchover Considerations

Special considerations apply when installing Dialer server in a switchover environment. If you do not use a switchover server, you can ignore this section.

We recommend that you install Dialer server on both the primary and secondary systems before starting services on the secondary machine. If Dialer server is not installed on the primary, the secondary machine will not show Dialer processes or Dialer server parameters.

Before installing Dialer server on a switchover pair, break the switchover or unplug the network cable. Otherwise, switchover may wipe Directory Services entries before you can install it on the other machine. This happens especially when the "Dialer Campaign Server" server parameter is used.

Since the Dialer server install is manipulating Directory Services and handlers, the switchover pair needs to be broken prior to the install and any Dialer server release that is being applied to the CIC Server.

If CIC is left running during the install, the Dialer subsystems will not automatically start at the end of the install. You must restart the IC Service to bring the Dialer subsystems up. As you are restarting IC, you should do this at a strategic time that least affects users.

When a switchover occurs, a dialog will pop in Interaction Scriptor.NET Client to alert agents that a switchover occurred and Dialer statistics in Interaction Dialer views in Interaction Center Business Manager will be lost. Statistic rules start over again after a switchover because statistics on the previous primary server are no longer available.

An agent using Scriptor in Interaction Connect is not notified. Some controls may become temporarily unavailable if the switchover requires a subsystem to restart. No downtime should occur for the agent.

## Server License Prerequisites

Interaction Dialer is a secure product that requires license authorization. License files on each Dialer server / CIC server govern the operational availability of Interaction Dialer, Interaction Scriptor .NET Client, and other components such as the availability of Interaction Dialer views in Interaction Center Business Manager.

Scripter in Interaction Connect does not require an extra license. A user must have the **Customize Client** security right to view the Scriptor tab in Interaction Connect.

Since CIC and Interaction Dialer use the same system management module for licensing, administrators can manage licenses on the CIC Server via Interaction Administrator and flexibly allocate those licenses. As your business changes and grows, you can easily view the status of your server licenses. This helps to better manage your budgeting concerns when increasing counts of features and functions on your system.

Each Dialer server has its own license.dat file. Interaction Dialer uses the same license file as the CIC server. To add Dialer and/or Scriptor authorization to an existing server license, you need to obtain an upgrade license from your authorized reseller or from the Interactive Intelligence web site.

Your Interactive Intelligence reseller can provide a license file for each Dialer server that implements the software options you have purchased. Certified Technical Implementers may obtain license files directly from the Interactive Intelligence License Management web site: <http://license.inin.com/>.

- The Central Campaign Server does not require a license file.
- Do not install any other software until updated license files have been applied to your Dialer/CIC servers.

### License-Related Procedures

The procedure used to acquire, upgrade and install CIC license files is documented in the *IC Licensing Technical Reference*. (Since that document is updated frequently, we recommend that you download the latest version from the Technical Reference Documents section of the CIC Documentation Library at [Help.inin.com](http://help.inin.com).) For more specific information on Dialer licenses, see the [Licenses used by Dialer and Scriptor](#) section of this document.



## Licenses used by Dialer and Scripter

Feature and access licenses govern the operational availability of Interaction Dialer, Interaction Scripter .NET Client, and Scripter in Interaction Connect. CIC uses an application server license model that allows features and functions to be turned on using licensing rather than by installing modules at a later time frame. This makes it easier for system administrators to add functionality to the system through licensing and subsequent configuration.

### Feature Licenses

Interaction Dialer is made available on a CIC server by feature licenses.

License Name	Description
I3_FEATURE_DIALER_BASE and I3_FEATURE_DIALER_ADVANCED	In order for a CIC server to function as an automated Outbound Dialer Server, you need to load both of these feature licenses.
I3_FEATURE_MANUAL_CALL_ONLY_SERVER	In order for a CIC server to function as a Manual Calling Server, you only have to load this feature license.

**Note:** Other than being limited to only making manual calls, the Manual Calling Server License provides the exact same Interaction Dialer feature set as the standard Outbound Dialer Server license.

### Access Licenses

Interaction Dialer makes use of Interaction Center's licensing system to control the availability of various components to the system's users. The Dialer specific access licenses and their functions are as follows:

License Name	Description
I3_ACCESS_DIALER_ADDON	Allows agents to login to campaigns. This license is also required to access Dialer containers in IC Business Manager. Without this license, the Dialer Administrator workspace is not created and administrator views are not available.
I3_ACCESS_INTERACTION_SCRIPTER_ADDON	Allows the interaction Scripter .NET client to be run. Enables Scripter in Interaction Connect.
I3_ACCESS_DIALER_SUPERVISOR_PLUGIN	Allow Interaction Center Business Manager Dialer views to be accessed.

### Language Licenses

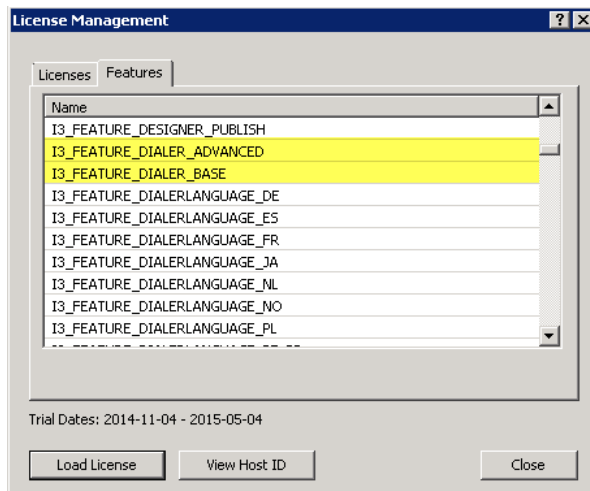
If you plan to install Interaction Dialer with a language pack, then you will need to load the appropriate language license key

License Name	Description
I3_FEATURE_DIALERLANGUAGE_ZH_HANT	Chinese (Traditional)
I3_FEATURE_DIALERLANGUAGE_ZH_HANS	Chinese Simplified
I3_FEATURE_DIALERLANGUAGE_DA	Danish
I3_FEATURE_DIALERLANGUAGE_NL	Dutch

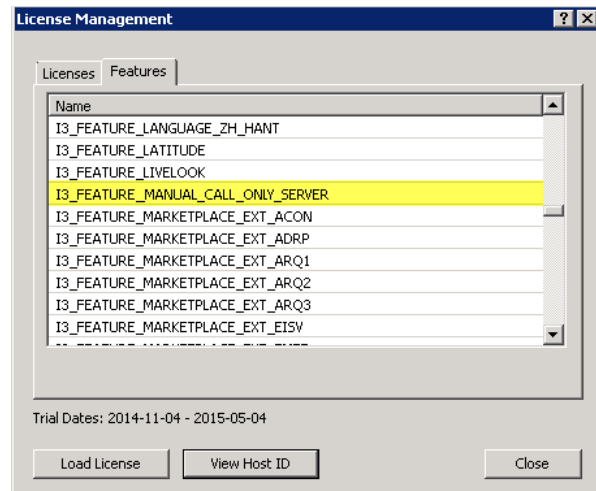
I3_FEATURE_DIALERLANGUAGE_FR	French
I3_FEATURE_DIALERLANGUAGE_DE	German
I3_FEATURE_DIALERLANGUAGE_IT	Italian
I3_FEATURE_DIALERLANGUAGE_JA	Japanese
I3_FEATURE_DIALERLANGUAGE_KO	Korean
I3_FEATURE_DIALERLANGUAGE_NO	Norwegian
I3_FEATURE_DIALERLANGUAGE_PL	Polish
I3_FEATURE_DIALERLANGUAGE_PT_BR	Portuguese Brazilian
I3_FEATURE_DIALERLANGUAGE_RU	Russian
I3_FEATURE_DIALERLANGUAGE_SR	Serbian
I3_FEATURE_DIALERLANGUAGE_ES	Spanish
I3_FEATURE_DIALERLANGUAGE_SV	Swedish
I3_FEATURE_DIALERLANGUAGE_TR	Turkish

### License verification

Once you have installed the Dialer server and loaded the appropriate license, you can verify the license installation in Interaction Administrator by accessing the License Management command on the File menu and selecting the Features tab.

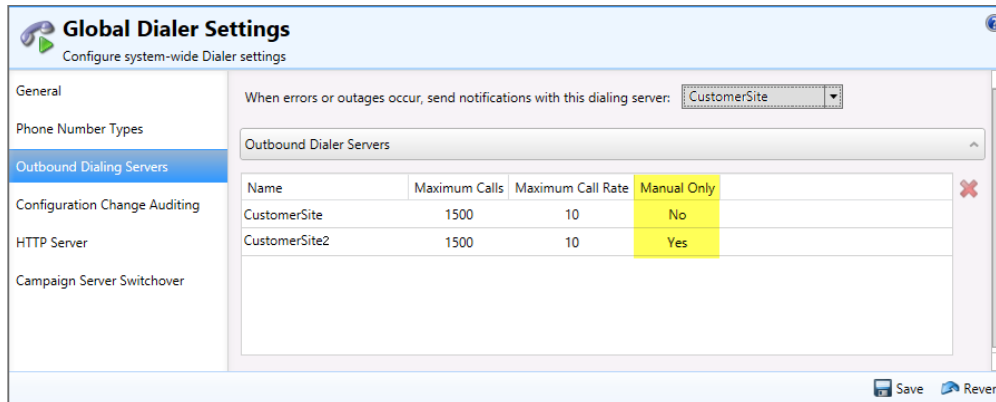


Outbound Dialer Server



Manual Calling Server

You can verify the server configuration in Interaction Administrator by accessing the Interaction Dialer>Advanced Interaction Dialer>Global Dialer Settings container and selecting the Outbound Dialer Servers tab. The table on this tab contains a column titled *Manual Only*. If you are running a Dialer server with the Manual Calling feature license, then the Manual Only column will display **Yes**. If you are running a Dialer server with the standard Outbound Dialing Server feature license, then the Manual Only column will display **No**.



## MCS Considerations

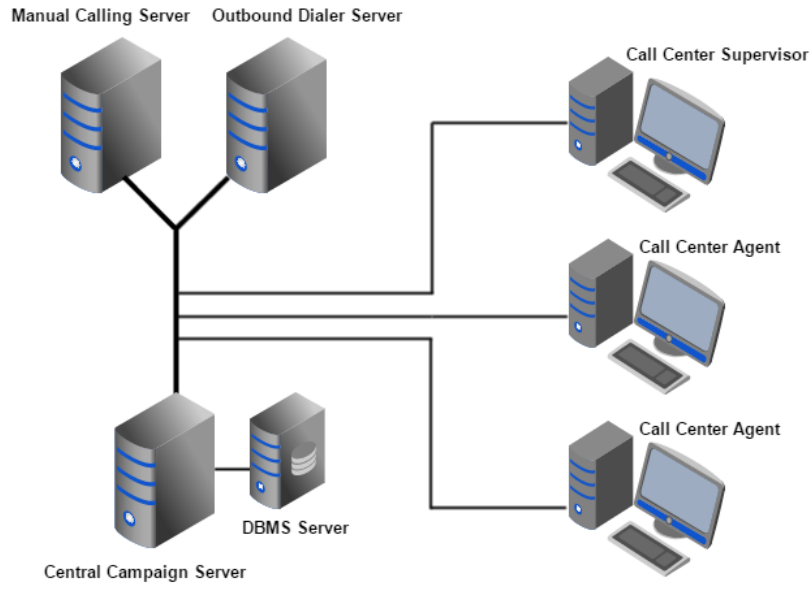
To respond to industry needs, we have added a manual calling feature to Interaction Dialer that in effect disables all of the automatic dialing capabilities. In other words, when using the manual calling feature, Interaction Dialer can only make manual calls. You can choose how you want Interaction Dialer to work, either as an automatic dialer or a manual-only calling system, by installing the appropriate license. For more information, see [Licenses used by Dialer and Scripter](#) section in this document.

When you choose to set up a Manual Calling Server (MCS), keep in mind that other than being limited to only making manual calls, the MCS has access to the exact same Interaction Dialer feature set as the standard Outbound Dialer Server (ODS). As such, an MCS can do everything that a standard ODS can with the exception of automatic dialing. The only calls allowed on an MCS are those manually placed by the agent.

Separate ODS and MCS servers can function in tandem on the same network at the same time. And both can access a single CCS at the same time. In fact, both an MSC and an ODS can run the same campaign; provided that it is a preview campaign.

If you are considering using or experimenting with a MCS in your environment, there are several things that you need to be aware of:

- Before you experiment with MCS on an existing CIC server or an existing ODS, make sure that you make a full system backup of the CIC/ODS as well as the Central Campaign Server (CCS). That way, a restore operation will allow you to return to a previous state with little or no trouble.
- A single CIC server can be configured to be either an ODS or an MCS, but not both. More specifically, you can only have one Dialer feature license installed on a Dialer server at a time.
- If you configure a Dialer server as an ODS, and then later decide that you would prefer it to be an MCS, you can make the change simply by removing the ODS license and loading the MCS license.
- If you configure a Dialer server as an MCS, and then later decide that you would prefer it to be an ODS, you will have restore the system to a previous state prior to the MCS configuration or rebuild the system from scratch. If you attempt to circumvent this requirement by swapping out licenses, you will render the Dialer server inoperable.
  - You will also need to restore the CCS to a previous state prior to the MCS configuration.
- If you are going to have both an ODS and an MCS on the same network, it is *crucial* that they each have an individual site name. This is particularly important if while experimenting, you change a Dialer server back and forth between an MCS configuration and an ODS configuration.



## Install Outbound Dialer Server

Use this procedure to install Interaction Dialer server components on a CIC server. First-time installation sets up Dialer server as an add-on to the Interaction Center service. The Outbound Dialer server starts automatically when the Interaction Center service is started.

You do not need to halt any services manually before running setup. However, you do need to warn users that a temporary outage is going to occur.

**Note:** Interaction Dialer uses a single installation procedure to install the Dialer server, which is by default referred to as an Outbound Dialer Server. However, the functionality of the Dialer server will not be determined until the appropriate license, Outbound Dialer Server (ODS) or a Manual Calling Server (MCS) is installed.

The screen caps in this procedure are out of date and will be replaced in a future update.

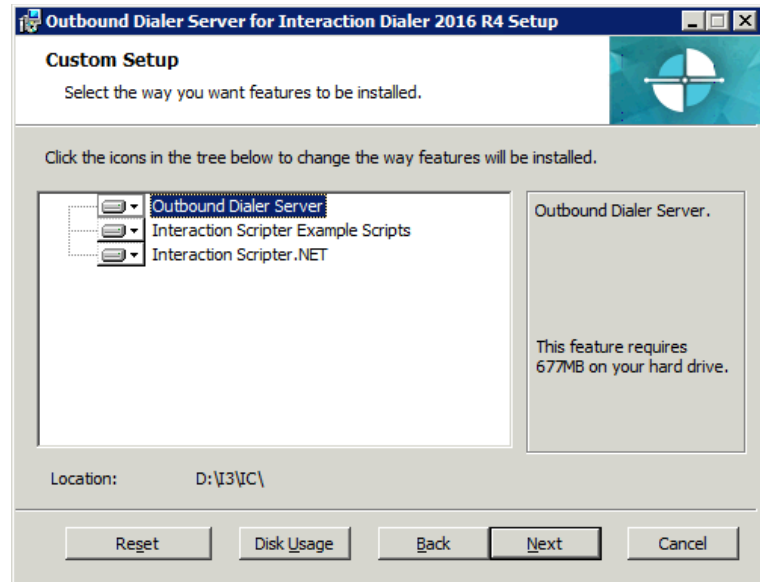
1. Logon to the Dialer server using the IC Administrator account. The IC Administrator credentials ensure you have permission to install Dialer server components.
2. Do one of the following:
  - Copy the ODS\_2016\_R3.msi file to the ODS and double click the file.
  - From the Interactive Intelligence Products interface, choose the Server Components tab, select the Outbound Dialer Server 2018 R4 check box, and click **Install**.
3. When the Welcome to the Central Campaign Server Setup Wizard for Interaction Dialer 2018 R4 dialog appears, click **Next**.



4. The Custom Setup dialog opens.

You can select any one of the features to see how much hard drive space that feature will require. For more detailed information, click **Disk Usage**.

When you are ready, click **Next**.

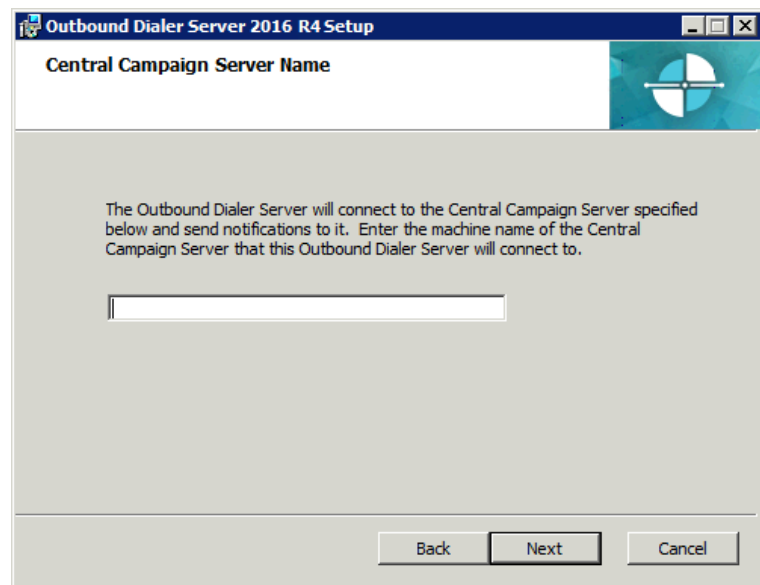


5. The Central Campaign Server Name dialog opens.

In the text box, type the name of the Central Campaign Server to which this Outbound Dialer Server will connect and click **Next**.

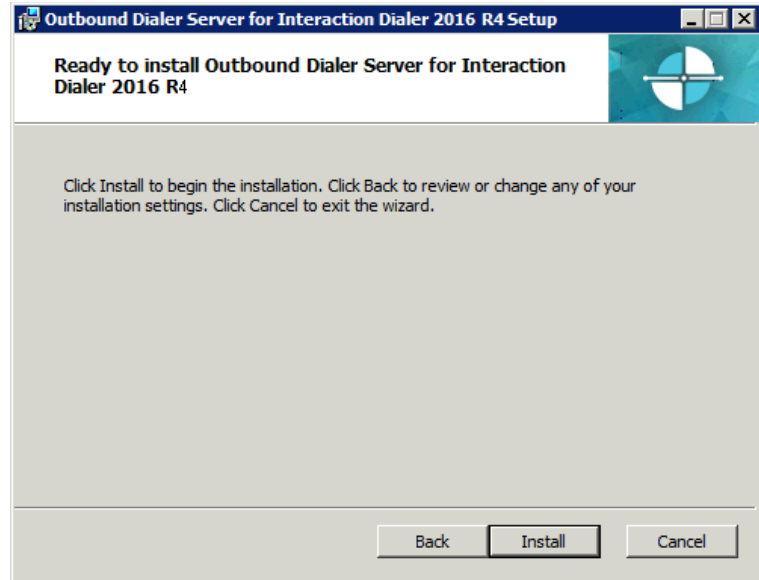
The installer will then verify the CCS you entered by contacting Notifier on the IC Server.

**Note:** If the connection verification fails, you'll see an error message and will be prompted to confirm that you entered the correct CCS name. Keep in mind that this error may occur if Interaction Center Services are not running or if the CCS is unavailable on the network.



6. The Ready to install Outbound Dialer Server for Interaction Dialer dialog appears.

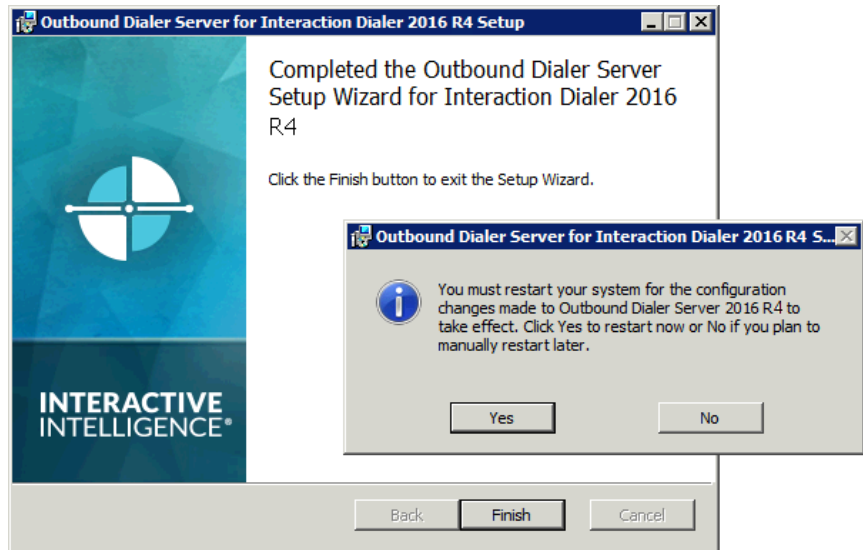
When you are ready to begin the installation, select **Install**.



7. As the installation continues, a status bar indicates the progress.

8. When the Completed the Outbound Dialer Server Setup Wizard for Interaction Dialer dialog appears, click **Finish** to exit the Setup Wizard.

9. When the procedure prompts you to restart the system, click **Yes**.



## Results of Installation

The ODS install added or updated the following dialing extensions and administration containers:

- Dialer configuration containers in Interaction Administrator. Access to Dialer containers is controlled by the IC server license.
- Interaction Center Business Manager share, which contains the setup.exe that adds Interaction Dialer views (campaign and agent monitoring) to a previously installed local instance of IC Business Manager.
- Dialer documentation was added to the documentation library on the IC server. Help files are also installed with application programs, and the Dialer server install also creates a shortcut titled "Interaction Dialer Documentation" to a help file that includes the complete Interaction Dialer documentation library.
- Directory shares on the Dialer server host client software installs, so that agents, supervisors, and developers can install workstation components without using the installation media.
- A DialerDeveloper placeholder share was created on the CIC server. The Dialer server install does not include the DialerDeveloper components. Administrators must copy the .msi into the DialerDeveloper placeholder share.

Share Name on ODS	Description of Install Software in the Share	
IC_ScripterNet	Share used to install Interaction Scripter .NET Client on a call center agent's PC, or a script developer's workstation. This client supports multi-page base scripts, single-page base scripts and custom scripts developed using the Interaction Scripter API (v4 or later).	
DialerDeveloper	Share used to install tools that developers need to create campaign scripts and API-based applications. Users can optionally install the following tools:	
	Developer Tool	Description
	Dialer IceLib Components	IceLib Dialer is an API that creates custom dialing clients and applications that configure Interaction Dialer.  <b>Note:</b> Dialer API documentation is available on the Interactive Intelligence Developer Portal site at <a href="https://developer.inin.com">https://developer.inin.com</a> .
	Interaction Scripter Developer's Guide	Interaction Scripter Developer's Guide explains how to develop custom campaign scripts for Interaction Scripter .NET Client.
IC_BusinessManagerApps	Setup.exe in this share adds Interaction Dialer views to a previously installed local instance of IC Business Manager.	
IC_ServerManagerApps	Setup.exe in this share adds Interaction Dialer containers to Interaction Administrator on top of a previously installed local instance of IC Server Manager.	

**Note:** More detailed information pertaining to these shares and the individual installation procedures can be found in the Off-Server Components and Options Installation section of this document.



## Off-Server Components

In addition to the Central Campaign Server 2018 R4, Off-Server Components includes installations for Dialer Plug-ins for IC Session Manager Server 2018 R4 and Dialer Developer 2018 R4.

### Hardware and Software Requirements

Hardware and software requirements for servers and workstations on which you will run the Off-Server installations can be found on the *CIC Installation and Configuration* section of the CIC Documentation Library at [Help.inin.com](http://Help.inin.com).

## Dialer Plug-ins for IC Session Manager Server Overview

The Dialer Plug-ins for IC Session Manager Server package is not required in all Dialer environments. This plug-in is typically installed by larger organizations that want to deploy the off-server Session Manager components on file servers separate from the IC Server. This feature supports N+1 scalability and disaster recovery.

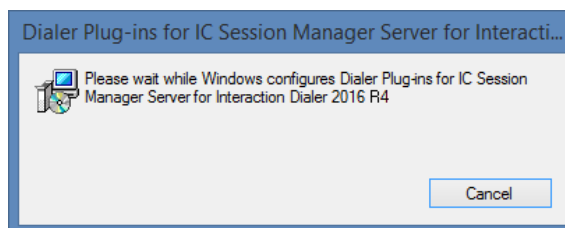
This plug-in installs additional components that Interaction Dialer needs to communicate with off-server Session Manager. For planning and installation instructions, see the *Session Manager Developer Application Note* in the Technical Reference Documents section of the IC Documentation Library.

## Install Dialer Plug-ins for IC Session Manager Server

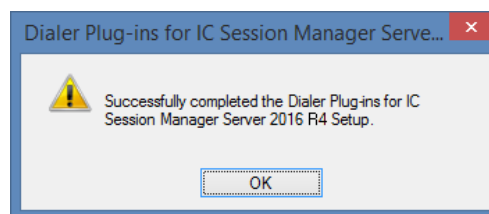
To install the Dialer Plug-ins for IC Session Manager Server:

1. Logon to the IC Session Manager Server using the IC Administrator account. The IC Administrator credentials ensure you have permission to install Session Manager components.
2. Navigate to the directory containing the `ICSessionManager_DialerPlugins_2016_R3.msi` file and double-click to launch it.
3. The Dialer Plug-ins for IC Session Manager Server 2018 R4 dialog appears and the installation begins immediately.

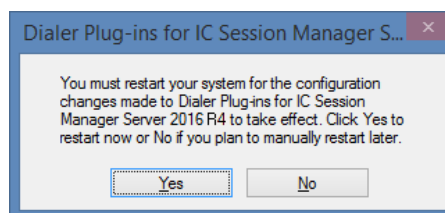
As the installation continues, a status bar indicates the progress.



4. When the Successfully completed the Dialer Plug-ins for IC Session Manager Server 2018 R4 dialog appears, click **OK** to complete the plug-in installation.



5. When the installation procedure prompts you to restart the system, click **Yes**.



## Dialer Developer Overview

Dialer Developer components can be installed on a developer's PC or workstation, or on PCs used by end-users of custom applications. The Dialer Developer setup installs API and utility components used by developers to create campaign scripts and API-based applications. Components can be installed on a developer's machine or on PCs used by end-users of custom applications.

The Dialer Developer components include:

- **Dialer IceLib Components:** IceLib Dialer is an API that creates custom dialing clients and applications that configure Interaction Dialer.
- **NRRLib:** The Dialer Number Request and Response Library API is used for creating applications that regulate interactions between Dialer and a contact list.
- **Interaction Scripter API:** The Scripter client runs campaign scripts that guide agents through stages of each campaign call. It runs single-page scripts and custom scripts created by developers. Users who need to run multi-page campaign scripts, should install Interaction Scripter Client .NET.
- **Interaction Scripter Developer Documentation:** The Interaction Scripter Developer's Guide explains how to develop custom campaign scripts.
  - You can find the Dialer API documentation on the Interactive Intelligence Developer Portal site at <https://developer.inin.com>.

Before you install the Dialer Developer components, you should install Interactive Update Client. Instructions for obtaining and installing Interactive Update Client can be found in the Optional Installations section of this document.

**Note:** The Dialer server install creates a DialerDeveloper placeholder share on the CIC server, but does not include the Dialer Developer components. The Dialer Developer components are available on the Dialer\_2016\_R3.iso in the Off-ServerComponents directory as a Windows Installer Package named DialerDeveloper\_2016\_R3.msi.

Before developers can install DialerDeveloper components, you will need to copy the DialerDeveloper\_2016\_R3.msi file from the Off-ServerComponents directory on the Dialer\_2016\_R3.iso to the DialerDeveloper placeholder share.

## Install Dialer Developer Components

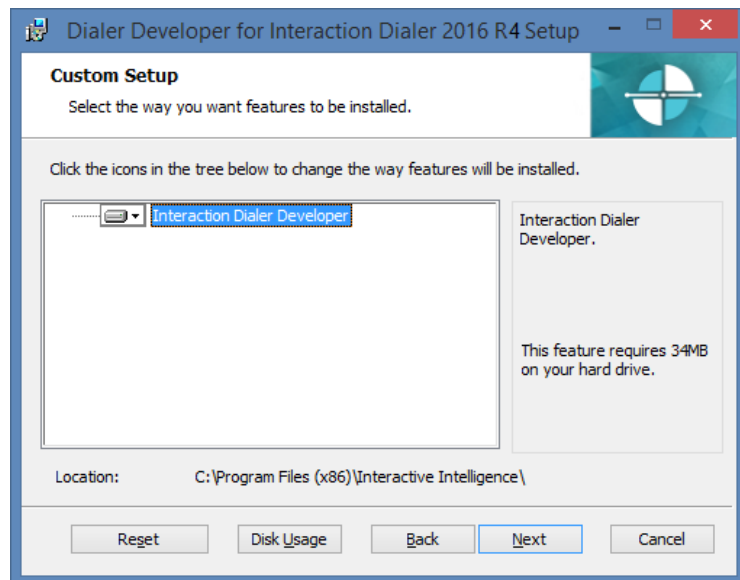
The screen caps in this procedure are out of date and will be replaced in a future update.

1. If you haven't already done so, install Interactive Update Client.
2. Navigate to the DialerDeveloper share on the CIC server.
3. Double-click DialerDeveloper\_2016\_R4.msi.
4. When the Welcome to the Dialer Developer Setup Wizard for Interaction Dialer 2018 R4 dialog appears, click **Next**.



4. The Custom Setup dialog opens.  
You can see how much hard drive space that feature will require. For more detailed information, click **Disk Usage**.

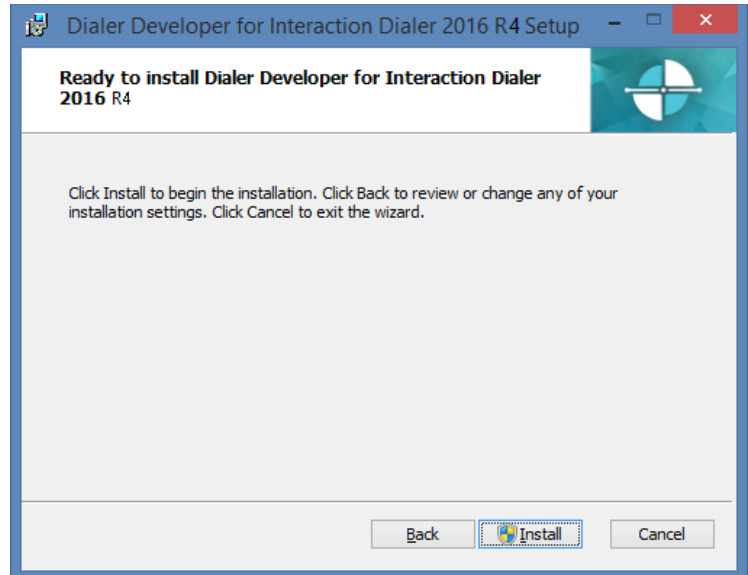
When you are ready, click **Next**



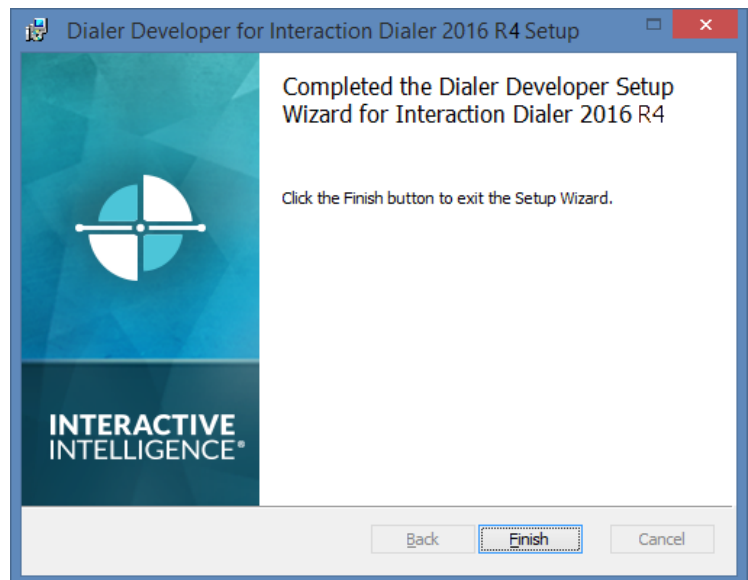
5. The Ready to install Dialer Developer for Interaction Dialer 2018 R4 dialog appears.

When you are ready to begin the installation, select **Install**.

As the installation continues, a status bar indicates the progress.



6. When the Completed the Dialer Developer Setup Wizard 2018 R4 dialog appears, click **Finish**.



## Optional Installations

There are several optional installations for Interaction Dialer that you can install on non-CIC/Dialer servers or workstations that you use to access Dialer. The optional installations covered in this section include:

- Interactive Update Client
- Interaction Scripter .NET Client
- Scripter in Interaction Connect
- Dialer Plug-ins for IC Business Manager Applications
- Dialer Plug-ins for IC Server Manager Applications

These optional installations are found in shared directories on the CIC/Dialer server.

### **Installation procedure**

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To install a workstation application, you will run Setup.exe from the appropriate shared directory on the CIC/Dialer server. This directory, created during the Dialer server installation, contains programs that can be installed on workstations used by call center agents, supervisors, and developers.

Setup.exe manually installs any workstation application by using .msi, .msp, or .mst files and enables you to choose both the language the workstation application install is displayed in and the localized versions of the application to install. Setup.exe also automatically applies the most recent patch (.msp) found in the workstation application share directory.

### **Hardware and Software Requirements**

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Hardware and software requirements for servers and workstations on which you will run the optional installations can be found in the *CIC Installation and Configuration* section of the CIC Documentation Library at [Help.inin.com](http://Help.inin.com).

## Interactive Update Client Overview

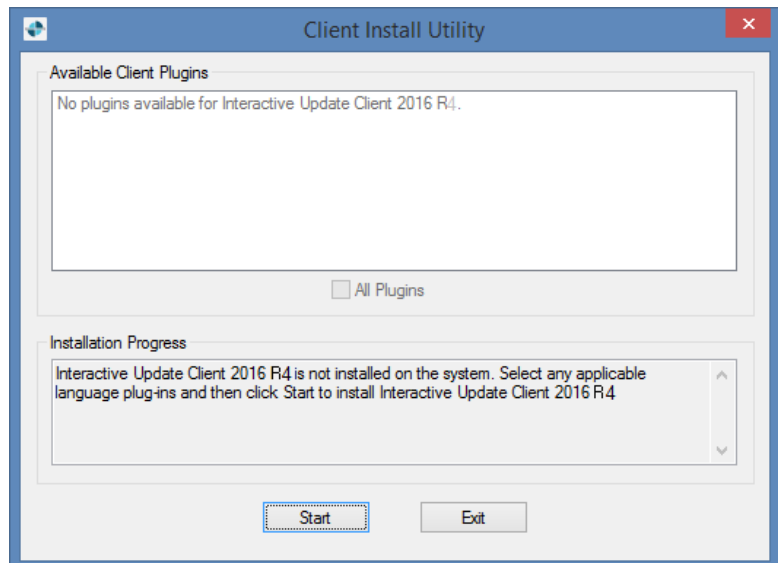
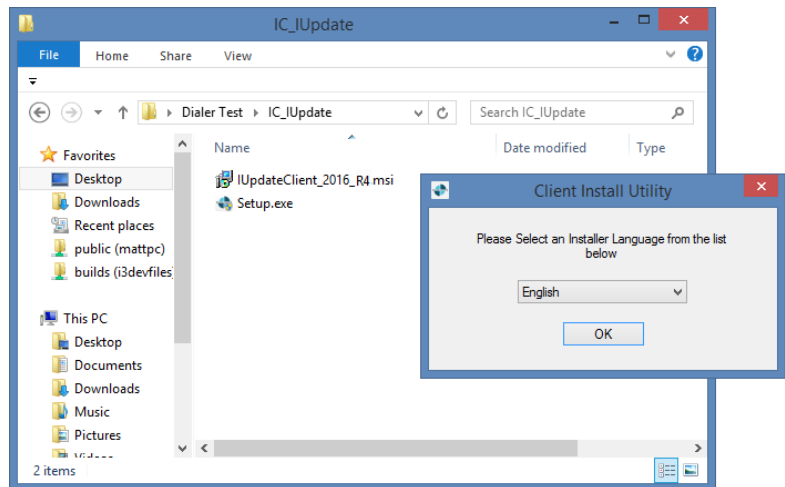
Interactive Update Client enables non-CIC/Dialer servers and workstations that access Dialer to receive updates from the Interactive Update Provider on the CIC server. To ensure compatibility with subsequent release updates, this should be installed. The Interactive Update Client installation is available on the IC\_Iupdate share on the CIC/Dialer server.

For more information, see the IC Installation and Configuration Guide and the Interactive Update Technical Reference in the CIC Documentation Library at [Help.inin.com](http://Help.inin.com).

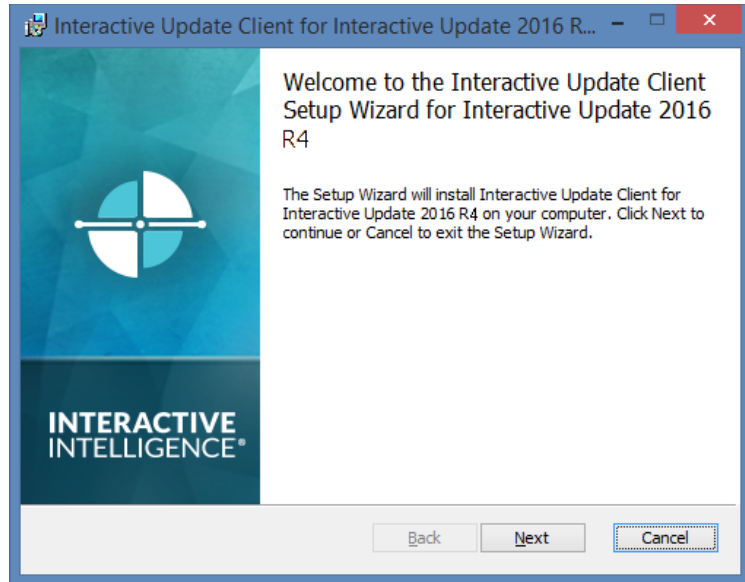
## Install Interactive Update Client

The screen caps in this procedure are out of date and will be replaced in a future update.

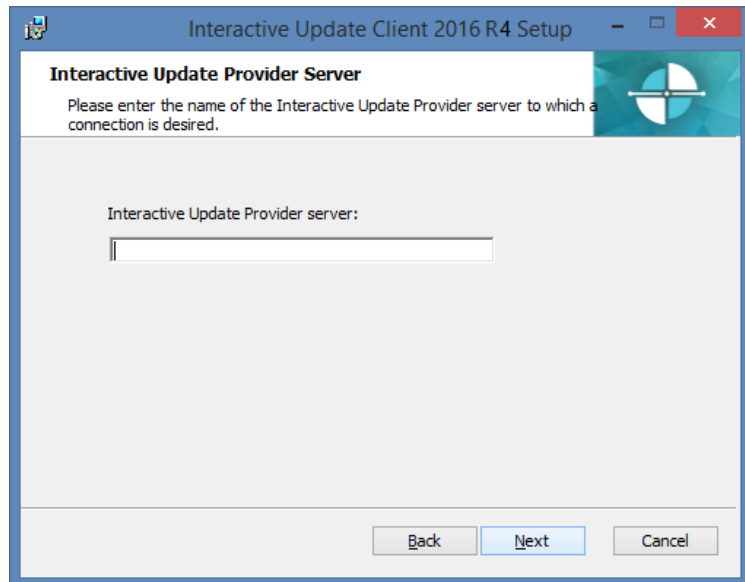
1. Navigate to the **IC\_Iupdate** share on the IC server.
2. Double-click **Setup.exe**.
3. In the Client Install Utility dialog, select **English** from the drop down list and click **OK**.
4. In the next Client Install Utility dialog, click **Start** to launch the Interactive Update Client Setup Wizard



5. The Welcome to the Interactive Update Client Setup Wizard for Interactive Update 2018 R4 dialog opens. Click **Next**.

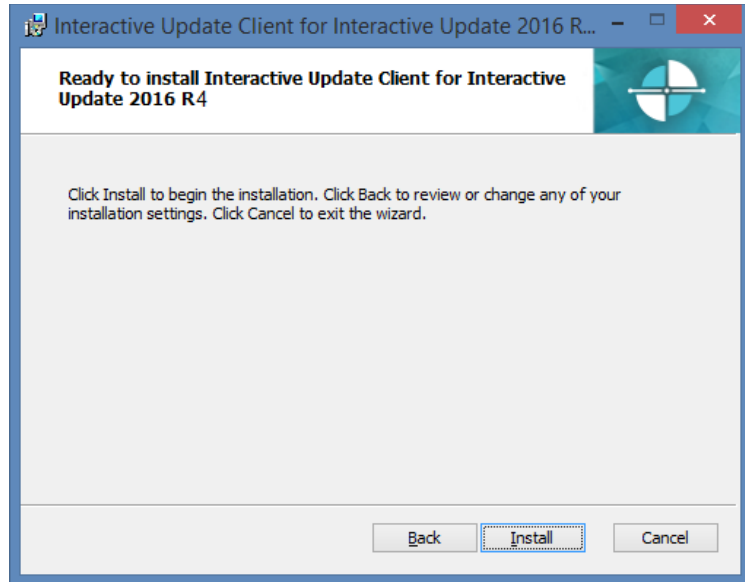


6. The Interactive Update Provider Server dialog opens.  
In the Interactive Update Provider server field, enter the name of the server that provides Interactive updates and click **Next**.

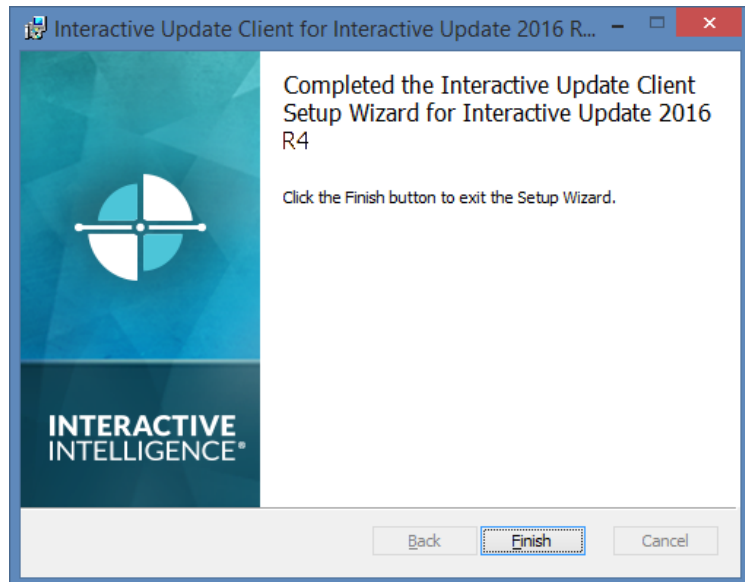


7. The Ready to install Interactive Update Client for Interactive Update 2018 R4 dialog opens.

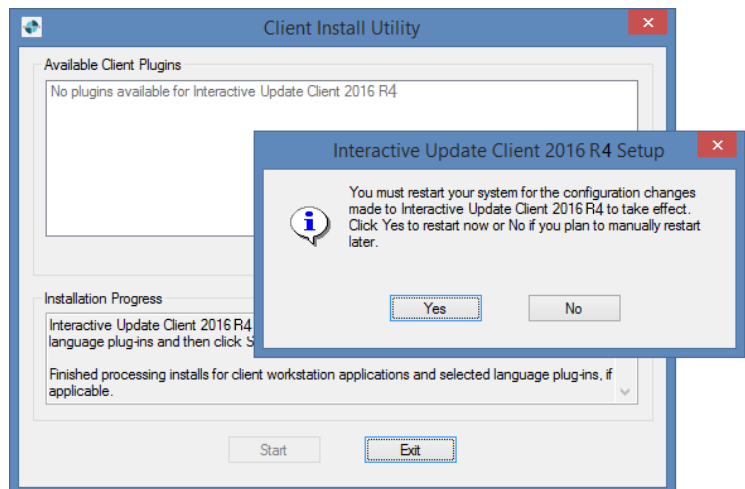
When you are ready to begin the installation, click **Install**



8. When the Completed the Interactive Update Client Setup Wizard for Interactive Update 2018 R4 dialog appears, click **Finish** to complete the installation.



9. When you return to the Client Install Utility dialog, click **Exit**.
10. When the installation procedure prompts you to restart the system, click **Yes**.





## Interaction Scriptor .NET Client Installation Overview

Interaction Scriptor .NET Client can be installed on call center agent's PC, or a script developer's workstation. You cannot install this client application on IC server. This client supports base scripts and custom scripts developed using the Interaction Scriptor API (v4 or later). Interaction Scriptor is the primary tool that call center agents use to disposition campaign calls. It populates the agent's display with information pertaining to the call, the customer, and the campaign, based on actions defined in campaign scripts.

Before you install Interaction Scriptor .NET Client, you should install Interactive Update Client. Instructions for obtaining and installing Interactive Update Client can be found in the Optional Installations section of this document.

The Interaction Scriptor .NET Client installation is available on the IC\_ScriptorNet share on the CIC\Dialer server.

**Note:** Interaction Scriptor.NET client is compatible with Internet Explorer versions 7 through 11 running on Windows versions 7 through 2012 R2. For more specific information, see the Software section on the Interactive Intelligence Testlab site: <http://testlab.inin.com/index.aspx>.

## Install Interaction Scriptor .NET Client

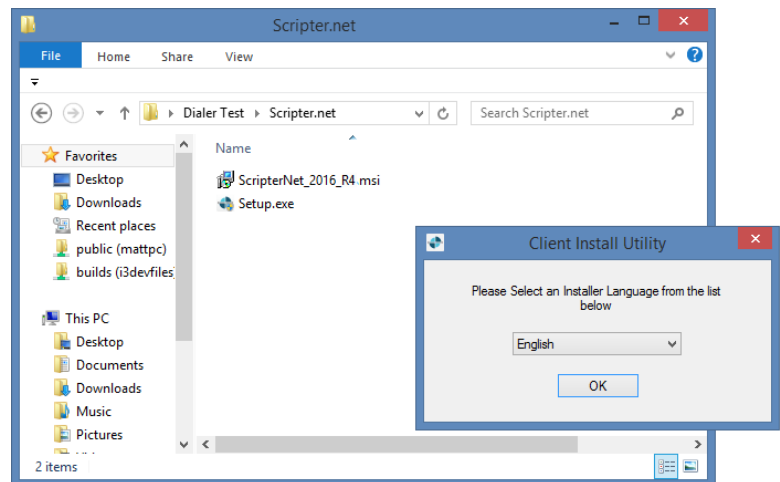
The screen caps in this procedure are out of date and will be replaced in a future update.

1. If you haven't already done so, install Interactive Update Client.

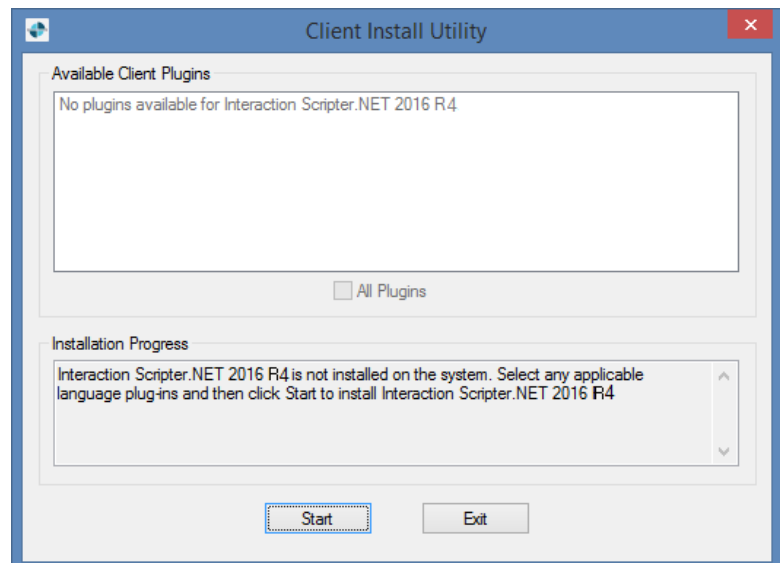
2. Navigate to the **IC\_ScriptorNet** share on the IC server.

3. Double-click **Setup.exe**.

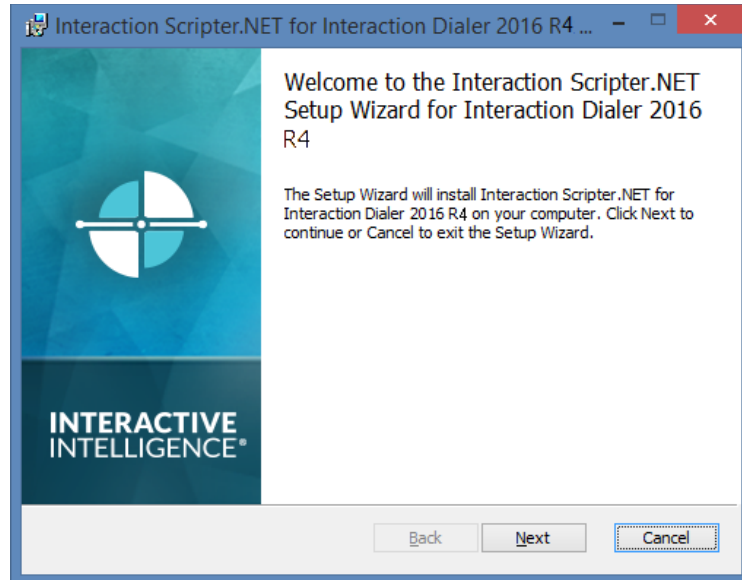
4. In the Client Install Utility dialog, select **English** from the drop down list and click **OK**.



5. In the next Client Install Utility dialog, click **Start** to launch the Interaction Scriptor .NET Setup Wizard.

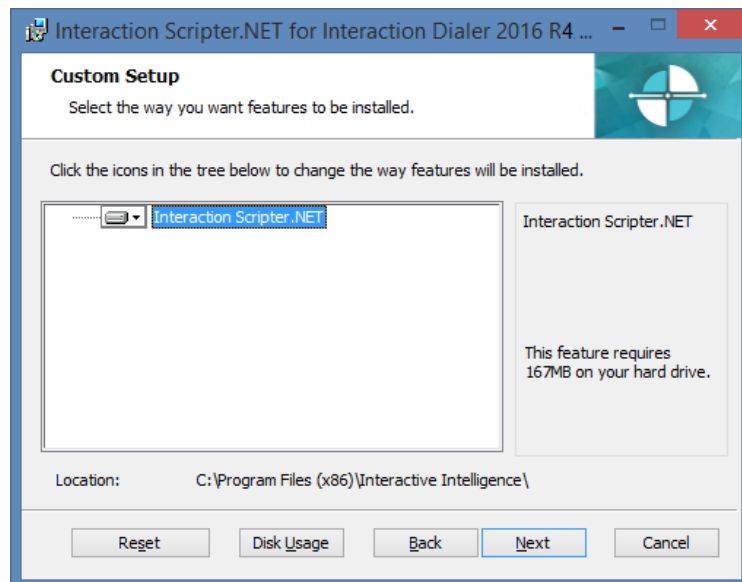


6. The Welcome to the Interaction Scriptor .NET Setup Wizard for Interaction Dialer 2018 R4 dialog opens. Click **Next**.



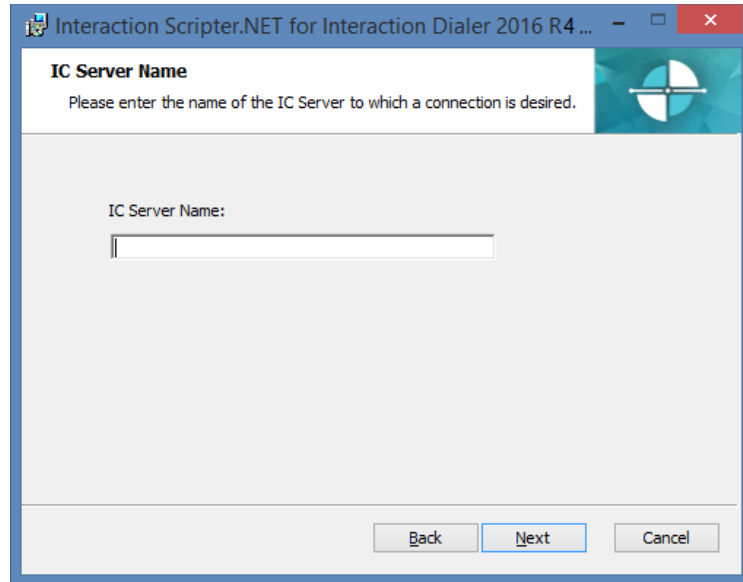
7. The Custom Setup dialog opens. You can see how much hard drive space that feature will require. For more detailed information, click **Disk Usage**.

When you are ready, click **Next**.



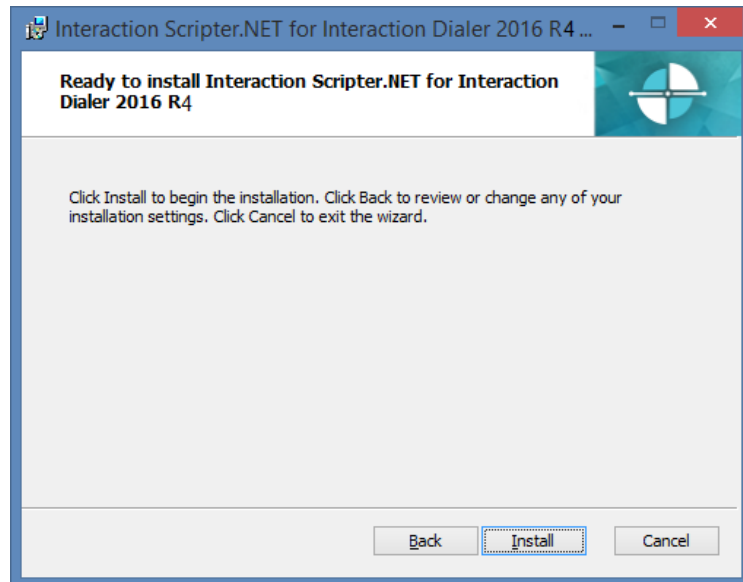
- The IC Server Name dialog opens.

In the **IC Server Name** field, enter the name of the IC (Outbound Dialer) Server and click **Next**.

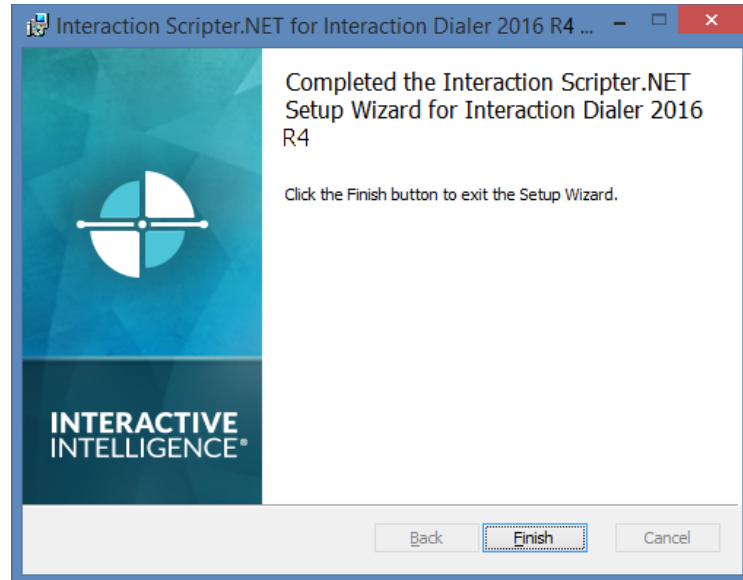


- The Ready to install Interaction Scriptor.NET dialog opens.

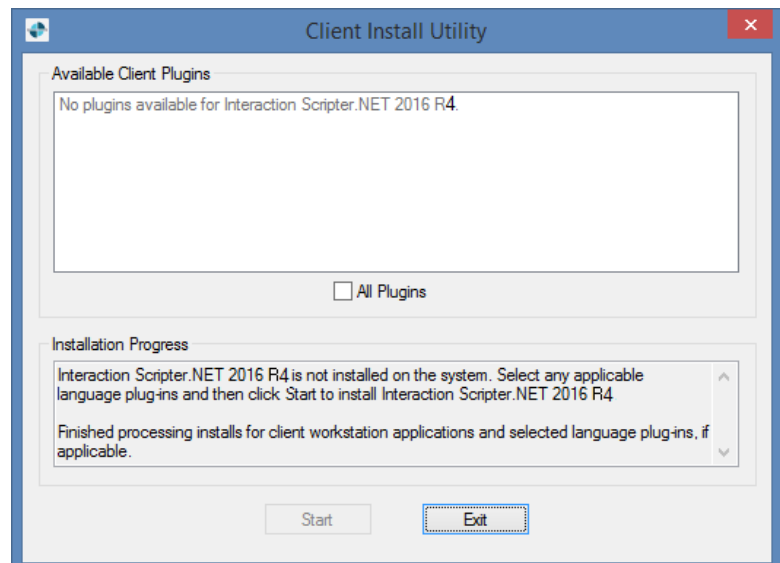
When you are ready to begin the installation, click **Install**.



10. When the Completed the Interaction Scriptor.NET Setup Wizard for Interaction Dialer 2018 R4 dialog appears, click **Finish** to complete the installation.



11. When you return to the Client Install Utility dialog, click **Exit**.



## Scripter in Interaction Connect

1. Scripter in Interaction Connect does not require any additional installations.
2. Certain controls do not work properly if you use Internet Explorer 11 with Windows 10 or Server 2012 R2 . Refer to CIC System Software Requirements for Web Browser at [https://help.inin.com/cic/desktop/Software\\_Requirements.htm](https://help.inin.com/cic/desktop/Software_Requirements.htm).
3. A user must have the **Customized Client** security right to view the Scripter tab in Interaction Connect.

## Dialer Plug-ins for IC Business Manager Applications Overview

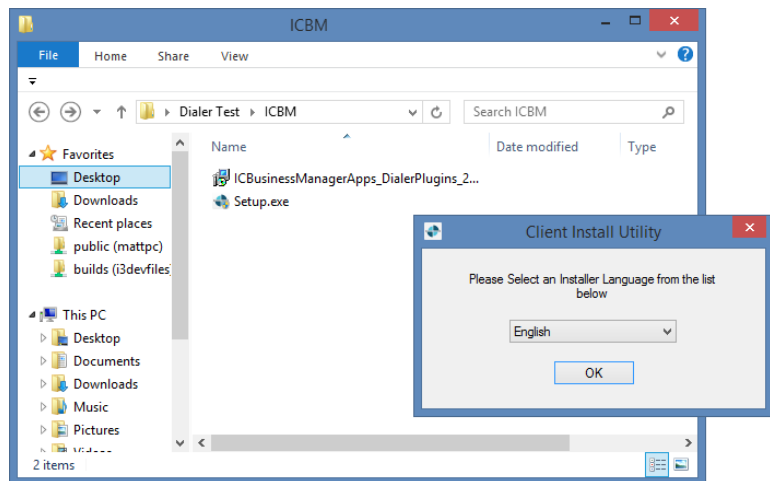
The Dialer Plug-ins for IC Business Manager Applications install adds Dialer components to a locally installed instance of Interaction Supervisor in IC Business Manager. After installation, Interaction Dialer views and reports will appear in IC Business Manager, subject to license restrictions and assignment of access rights.

The IC Business Manager applications are: Interaction Supervisor, Interaction Recorder Client, and Interaction Fax Cover Page Editor. Other IC Business Manager Applications, such as Interaction Feedback, Interaction Process Automation, and Interaction Recorder Client for IC Business Manager, are available with the appropriate licenses.

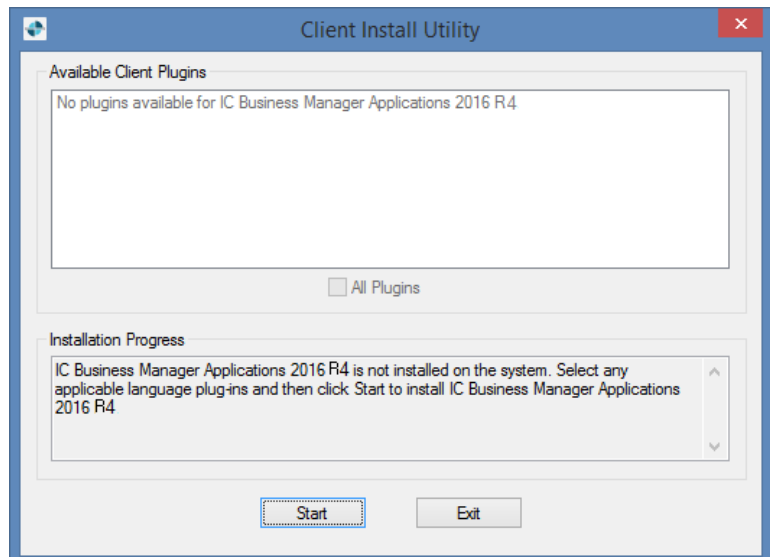
## Install Dialer Plug-ins for IC Business Manager Applications

The screen caps in this procedure are out of date and will be replaced in a future update.

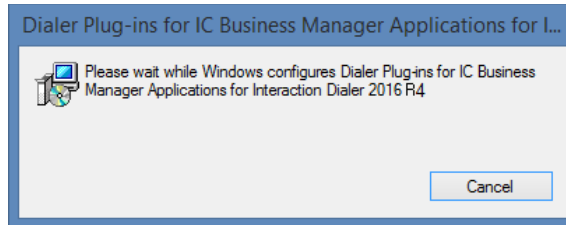
1. If you haven't already done so, install Interactive Update Client.
2. Navigate to the **IC\_BusinessManagerApps** share on the IC server.
3. Double-click **Setup.exe**.
4. In the Client Install Utility dialog, select **English** from the drop down list and click **OK**.



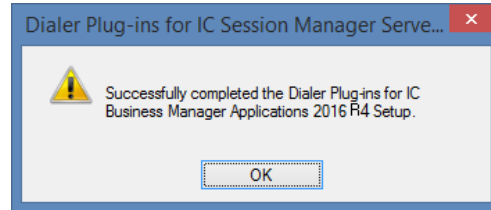
5. In the Available Client Plugins area, select the appropriate Dialer plug-ins for IC Business Manager Applications 2018 R2 check box.
6. When you are ready, click **Start**



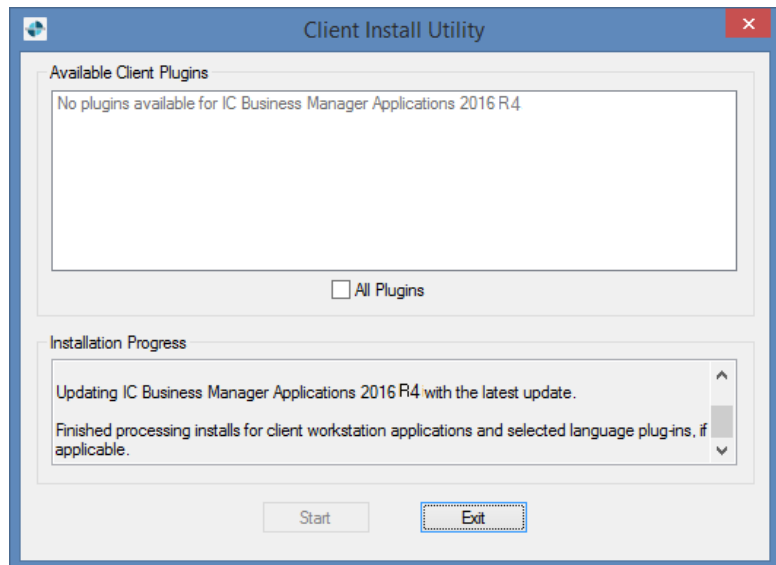
- The installation begins and you will see a status bar that indicates the progress.



- When the Successfully completed the Dialer Plug-ins for IC Business Manager Application 2018 R4 Setup dialog appears, click **OK** to complete the plug-in installation.



- When you return to the Client Install Utility dialog, click **Exit**.



## Dialer Plug-ins for IC Server Manager Applications Overview

The Dialer Plug-ins for IC Server Manager Applications adds Dialer components to a locally installed instance of IC Server Manager Applications. After installation, Dialer configuration containers will appear in Interaction Administrator, subject to license restrictions and assignment of access rights.

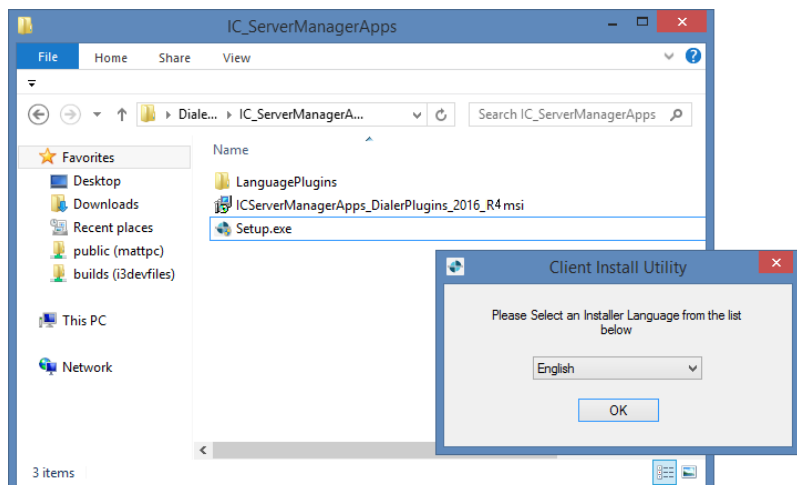
The IC Server Manager Applications are: Interaction Administrator, Interaction Attendant, Interaction Designer, IC System Manager, Interaction Host Recorder, Interaction Recorder Client, and Interaction SOAP Tracer. Other IC Server Manager Applications, such as Interaction Process Automation, are available with the appropriate licenses.

**Note:** Before you install the Dialer Plug-ins for IC Server Manager Applications, the IC Server Management Applications must be installed.

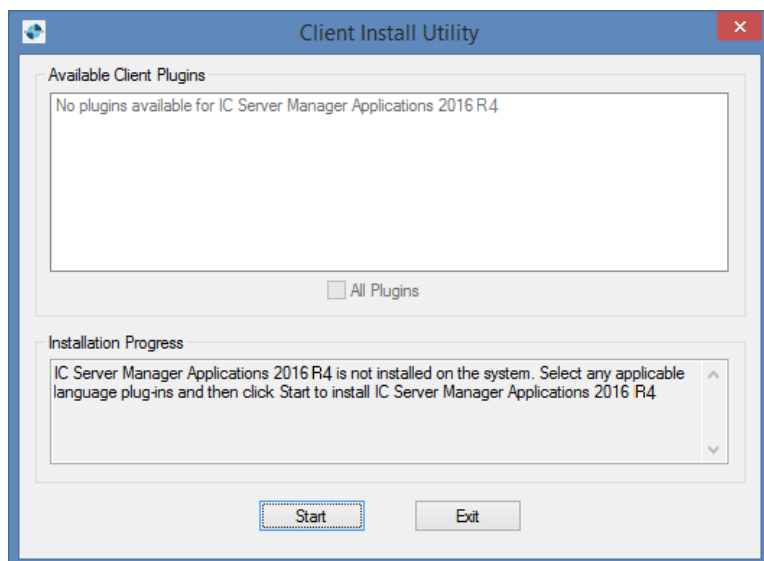
## Install Dialer Plug-ins for IC Server Manager Applications

The screen caps in this procedure are out of date and will be replaced in a future update.

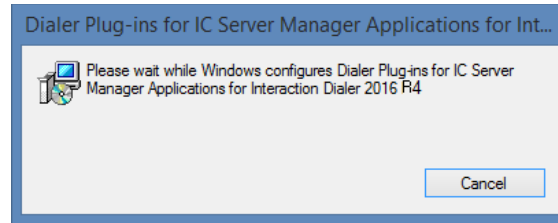
1. If you haven't already done so, install Interactive Update Client.
2. Navigate to the **IC\_ServerManagerApps** share on the IC server.
3. Double-click **Setup.exe**.
4. In the Client Install Utility dialog, select **English** from the drop down list and click **OK**.



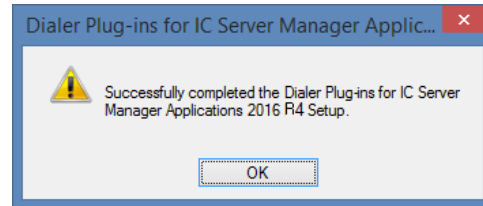
5. In the Available Client Plugins area, select **Dialer plug-ins for IC Business Manager Applications 2018 R4** check box.
6. When you are ready, click **Start**



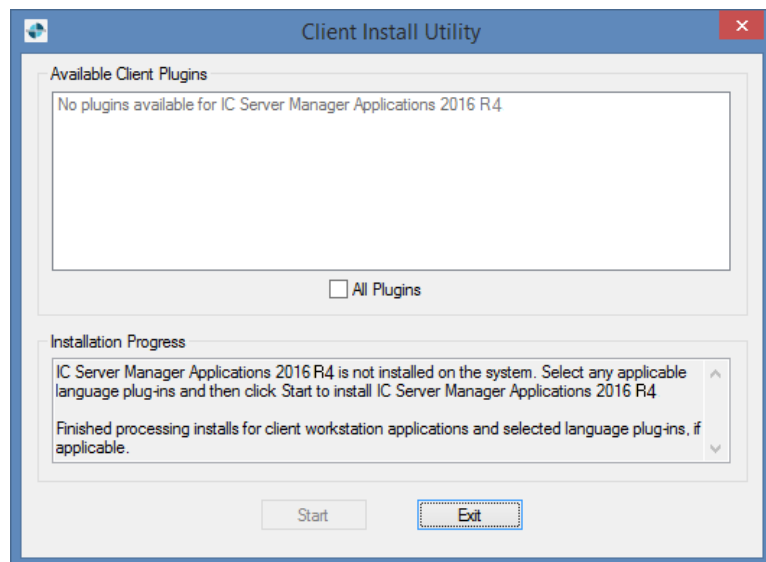
- The installation begins and you will see a status bar that indicates the progress.



- When the Successfully completed the Dialer Plug-ins for IC Server Manager Applications 2018 R4 Setup dialog appears, click **OK** to complete the plug-in installation.



- When you return to the Client Install Utility dialog, click **Exit**





## Change Log

Date	Description
June 21, 2014	Added the backup CCS capability
August 18, 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.
January 23, 2015	Added information about the Manual Calling feature and the new license. Updated Microsoft and Oracle DBMS information. Updated product version numbers and screen shots for the 2015 R2 release.
April 15, 2015	Updated product version numbers and screen shots for the 2015 R3 release. Updated CCS Switchover Setup Assistant section including new screen shots.
June 23, 2015	Updated the verification procedure in the Setup CCS Switchover section. Updated product version numbers and screen shots for the 2015 R4 release. Updated cover page to reflect new color scheme and logo. Updated copyright and trademark information.
September 22, 2015	Updated product version numbers and screen shots for the 2016 R1 release.
January 28, 2016	Changed Dialer Release Notes reference to CIC release Notes. Changed all the references and links to the new CIC Documentation Library at Help.inin.com. Updated the Versions Considerations section to emphasize that backwards compatibility is a temporary solution to only be used during the upgrade procedure. Updated product version numbers and screen shots for the 2016 R2 release.
April 14, 2016	Updated product version numbers and screen shots for the 2016 R3 release.
June 29, 2016	Updated product version numbers and screen shots for the 2016 R4 release. Added information about the ability to enable SHA-256 during the CCS installation procedure.
August 23, 2016	For 2016 R4, updated Oracle Database Considerations section to include Oracle Application Express (APEX) requirement. Updated Oracle Privileges section with additional privileges to be set.
December 7, 2016	Updated DBMS Requirements to include SQL Server 2016.
January 30, 2017	Added note to "Launch the CCS Switchover Setup Assistance" procedure to indicate that Primary CCS and Backup CCS must have same time zone setting in Microsoft.
April 10, 2017	Added clarification where necessary to distinguish between considerations that apply to Interaction Scripter.NET Client and Scripter in Interaction Connect.
May 22, 2017	Better described the I3_ACCESS_DIALER_ADDON license. See Licenses used by Dialer and Scripter.
December 12, 2017	Updated version numbers in this file for 2018 R2.
March 14, 2018	Updated CCS Hardware and Software Requirements. Microsoft Windows Server 2008 is not supported in 2018 R3.

March 27, 2018	Corrected the name of a security right mentioned in the Server License Prerequisites topic to read "Customize Client". Updated the list of Language Licenses in Licenses used by Dialer and Scripter to add Danish, Italian, Korean, Russian, Serbian, and Chinese (Traditional).
May 3, 2018	Updated CCS Hardware and Software Requirements to note that Microsoft .NET Framework 4.7 or later is required for PureConnect 2018 R3 and later.