

SmartConnect 21 – Install and Configuration

The install and configuration process for SmartConnect 21 is considerably different from earlier versions of the product. The installer itself has been slimmed down to provide a quicker install process, while a configuration tool has been added to give users additional setup options and control over the SmartConnect deployment.

NOTE: There is currently no upgrade path from earlier versions of SmartConnect (SmartConnect 2018, SmartConnect 2017, etc.) to the new SmartConnect 21 release. This document will be updated when an upgrade process is available. This release of SmartConnect should be used for new installs only, or for environments where another minor version of SmartConnect 21 has been used.

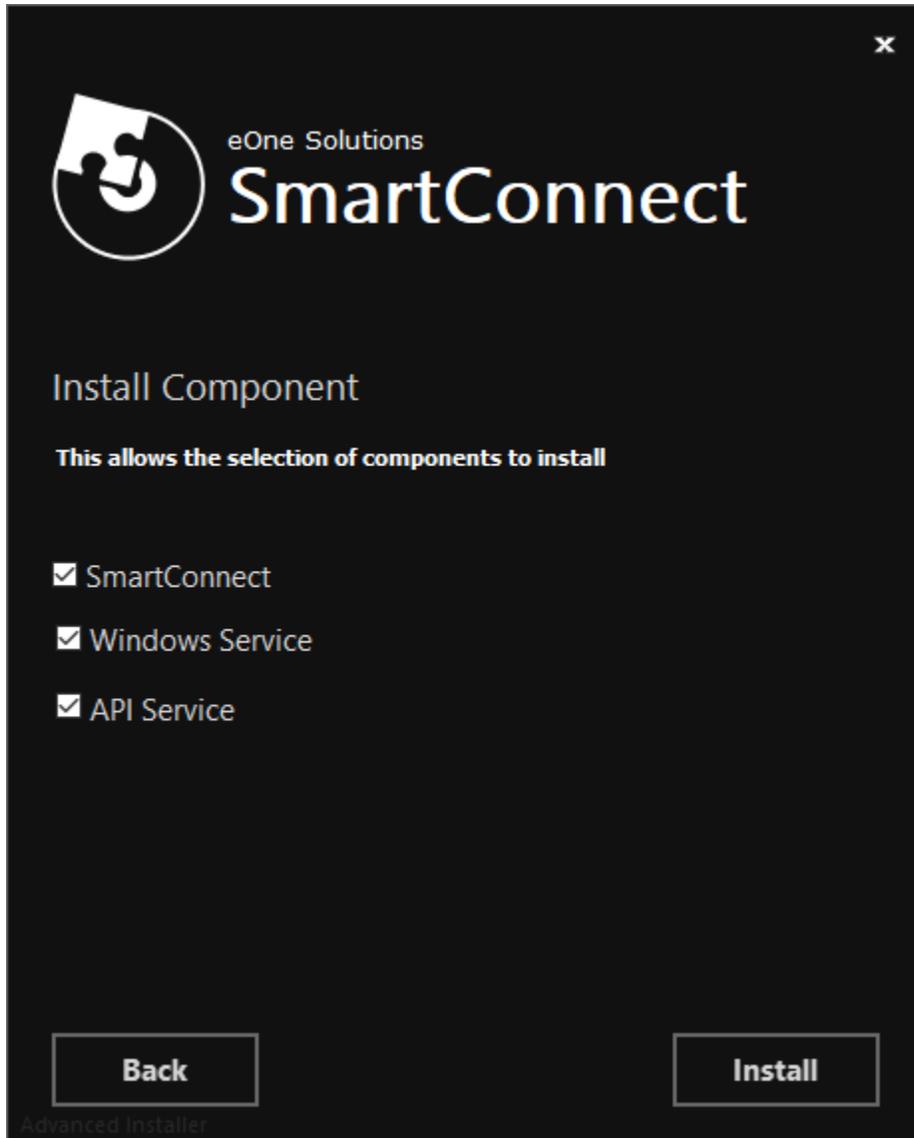
System Requirements

For SmartConnect to properly function, there are a few base requirements that must be met:

- A 64-bit operating system is required, Windows 8.1 or Server 2012 or later.
- .Net 4.7.2 or higher for any workstation running any component of SmartConnect.
- IIS 8.0 or higher on the workstation running the API service.
- Microsoft SQL Server 2012 or more recent release, or SQL Server Express.
- An internet connection is required during the configuration process. Perpetual licenses do not require an internet connection until the configuration process is ran again, subscription licenses will always require an internet connection for use of the product.

Install

When the SmartConnect 21 installer is launched, it has one screen with 3 components available to be selected.



Each component provides different functionality:

- SmartConnect
 - o The main user interface for the integration platform.
 - o Should be installed on any machine where users will need to access SmartConnect itself.

- Windows Service
 - This process handles any scheduling requirements within SmartConnect. This includes scheduled integrations, change data source cleanup routines and error log cleanup.
 - Should be installed on a server or workstation that will remain active.

- API Service
 - This process is used anytime a call is made to the SmartConnect web service.
 - Real-time data sources, the Excel add-in, and Excel templates all utilize the API service.
 - In order to successfully install and configure the API service, IIS is required to be enabled on the server.

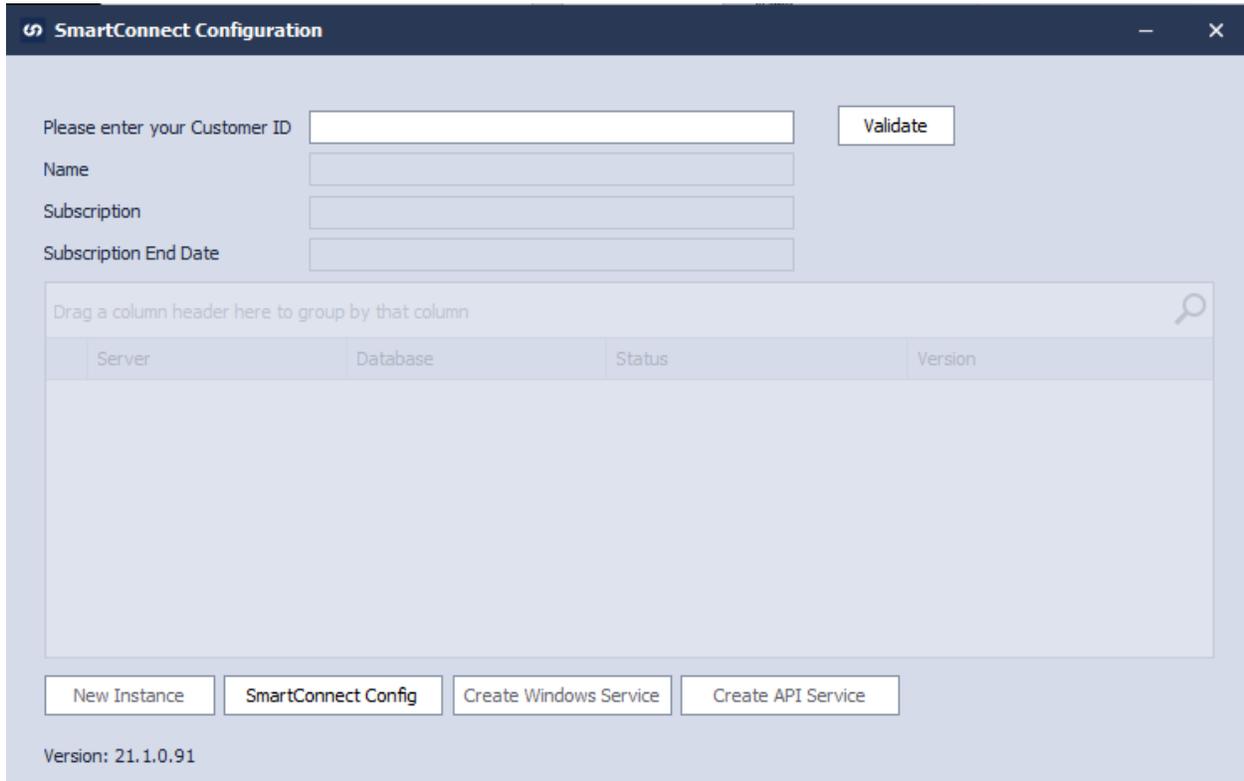
If the Windows Service or API Service options are not marked for a workstation install, the subsequent configuration process will not display those options when completing the setup. This can be used to install different components to separate workstations within an environment.

Clicking Install will perform the installation of SmartConnect. When complete, the installer can be closed. Before launching the SmartConnect interface, the SmartConnect configuration process must be completed on the workstation.

Configuration

After the installer is complete, the eOne.SmartConnect.Config.exe will need to be launched as an admin from the C:\Program Files\eOne Solutions\SmartConnect directory.

When the configuration tool is launched for the first time, it will not have any information displayed yet.

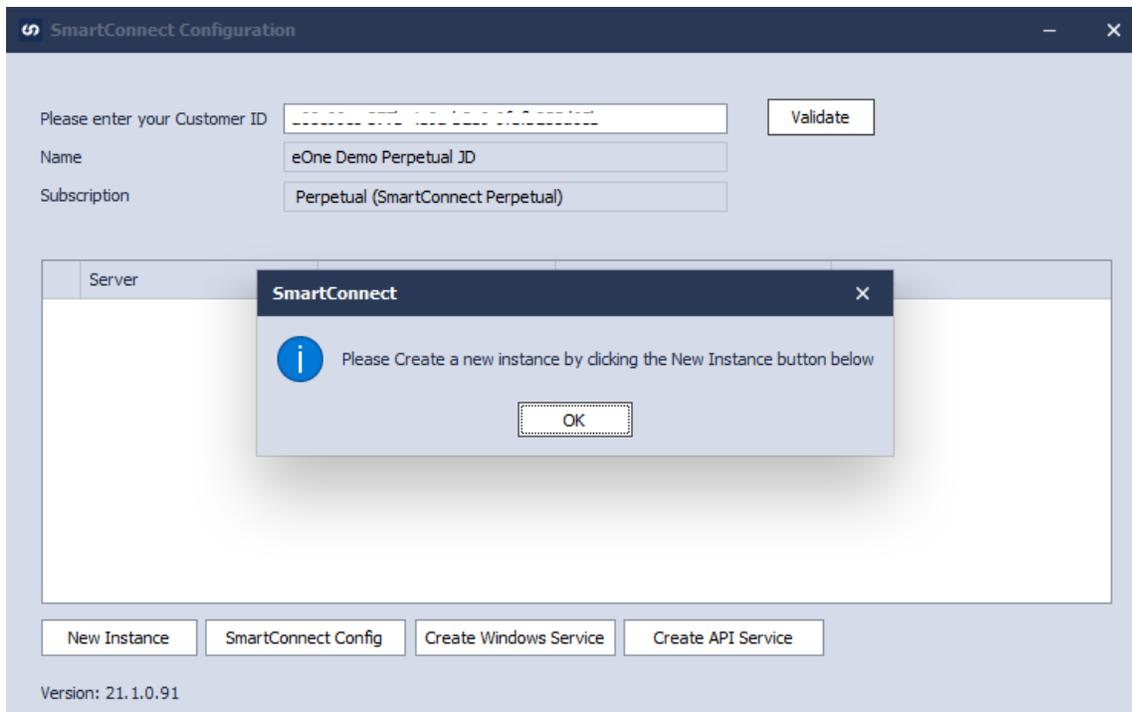


The screenshot shows the 'SmartConnect Configuration' application window. The title bar reads 'SmartConnect Configuration'. The main area contains a form with the following fields and buttons:

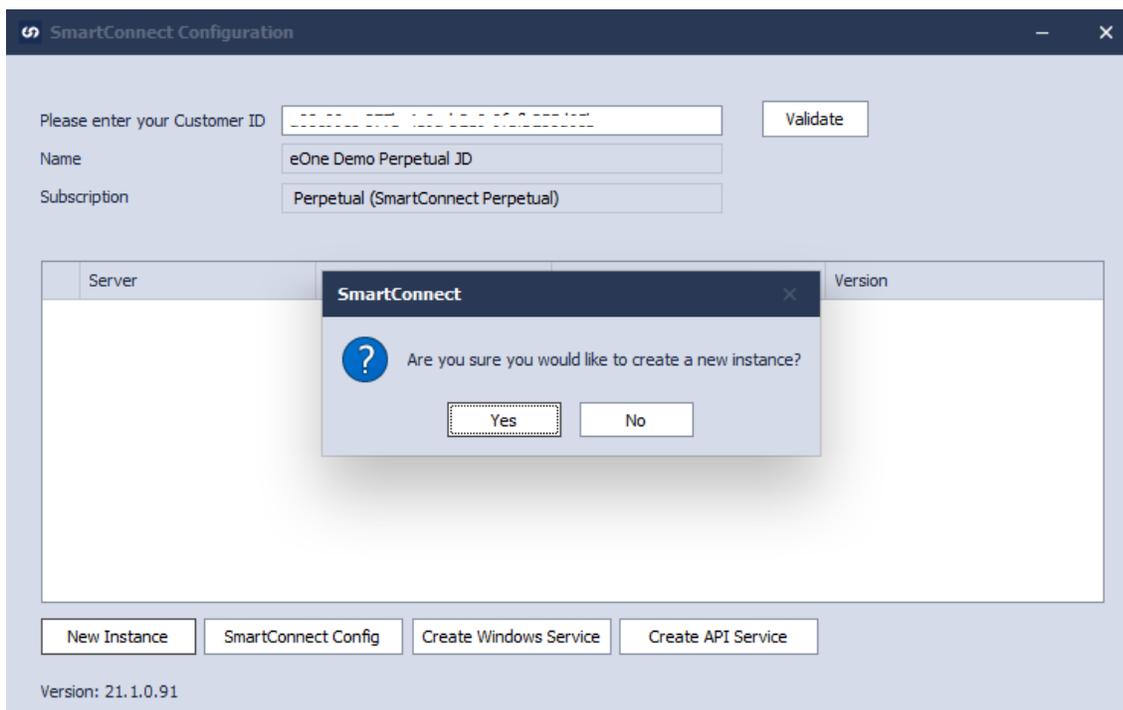
- A text input field labeled 'Please enter your Customer ID' with a 'Validate' button to its right.
- A text input field labeled 'Name'.
- A text input field labeled 'Subscription'.
- A text input field labeled 'Subscription End Date'.
- A table with a header row containing 'Server', 'Database', 'Status', and 'Version'. Above the table is the instruction 'Drag a column header here to group by that column' and a search icon.
- Four buttons at the bottom: 'New Instance', 'SmartConnect Config', 'Create Windows Service', and 'Create API Service'.
- Version information: 'Version: 21.1.0.91'.

The Customer ID must be entered and validated to continue the configuration process. That ID can be retrieved from the eOne Solutions web site under the renewals and registration keys section for an account.

When a valid ID is entered, it will enable the server list and the New Instance button.



The server list will be empty for any Customer ID that has not had previous installs performed. If the ID has other installs (development, testing, or UAT environments, etc.) they will be present in the list. For new installs, the New Instance button should be clicked to create a SmartConnect database and instance that registers with the account.



New Instance

Save | Cancel

SQL Server Details

MSSQL Server: HANSEL-PC\SQLEXPRESS

MSSQL User: sa

MSSQL Password: *****

Test Connection

SmartConnect Database

SmartConnect Database: SmartConnect_21_v3

SmartConnect User: SmartConnect_21_v3

SmartConnect Password: *****

SmartConnect User

Email: chris.hanson@eonesolutions.com

First Name: Chris

Last Name: Hanson

Password: *****

The New Instance window will create a new SmartConnect database and SQL user to connect to it, and if using a perpetual license, it will require that a user be created that will be used to log into SmartConnect once configuration is complete.

SQL Server Details

- MSSQL Server
 - o The name of the SQL server and/or instance that the SmartConnect database will be installed to.
- MSSQL User
 - o The SQL user that will be used during the installation to create the SmartConnect database and user. This user must be a SQL user (not a windows account) and must have rights to create objects in the selected server.

- MSSQL Password
 - The password for the user entered for the MSSQL User.
- Test Connection
 - Validates the connection to the server using the credentials provided. Must successfully validate before completing the new instance setup.

SmartConnect Database

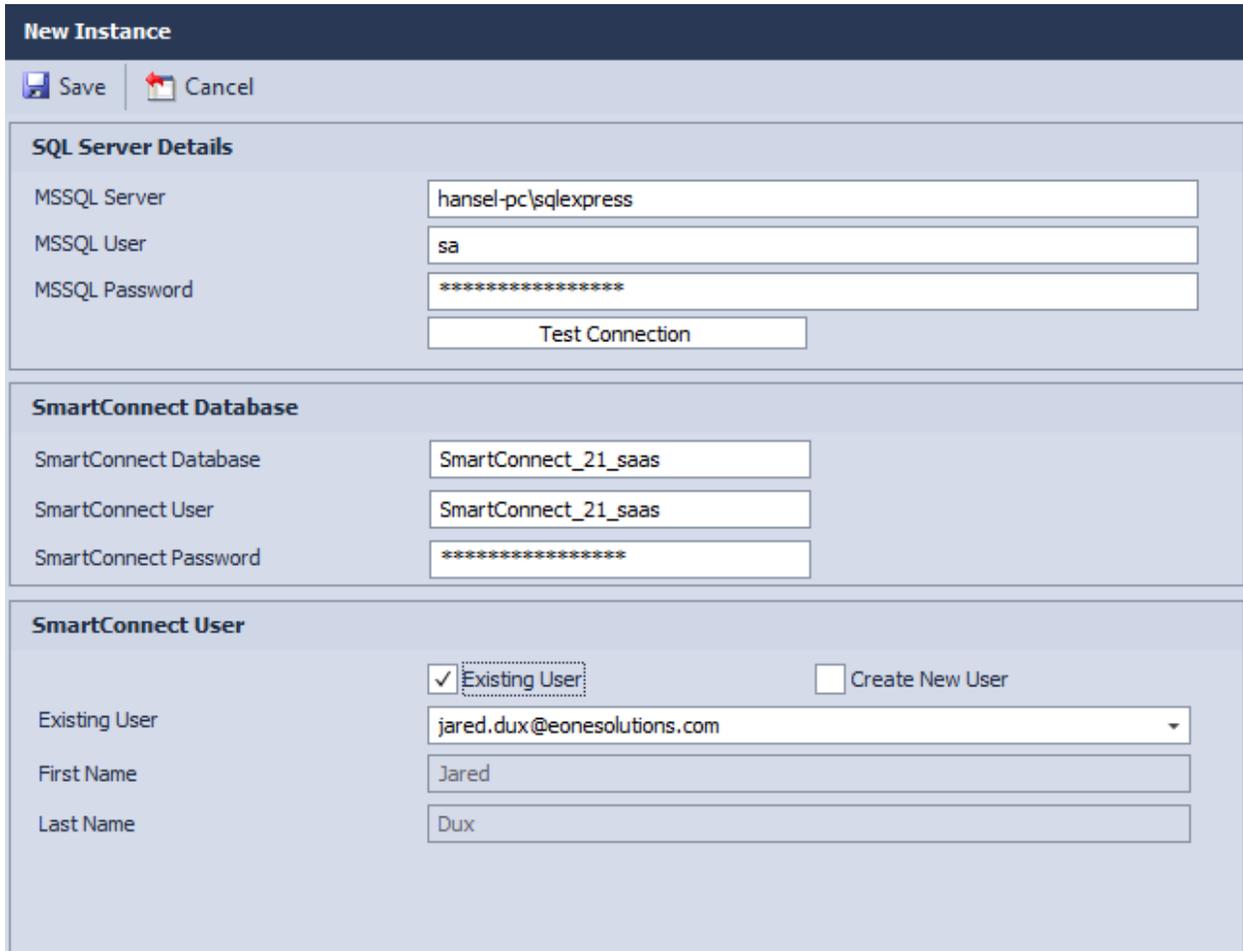
- SmartConnect Database
 - The name of the SmartConnect SQL database that will be created for this install instance.
- SmartConnect User
 - The name of the SmartConnect SQL user that will be created for this install instance.
- SmartConnect Password
 - The password that will be set for the SmartConnect SQL user.

SmartConnect User

- Email
 - The email for the first account that will be used to login to the SmartConnect application. A real email account should be used – password resets will be sent to that email address.
- First Name
 - The display first name for the user.
- Last Name
 - The display last name for the user.
- Password
 - The password for the email account that will login to the SmartConnect application. This password must be used on the first login to the application.

It is important to remember the email and password used for the first user on the SmartConnect instance. Those credentials will be used for the initial login to the application. Once in the application, additional users and logins can be configured. Passwords can also be reset while in the application.

The New Instance window changes slightly if the license type is a subscription rather than a perpetual license. An existing user can be used to complete the instance setup and login with that email and password that is already set, or a new user can be added.



New Instance

Save | Cancel

SQL Server Details

MSSQL Server: hansel-pc\sqlexpress

MSSQL User: sa

MSSQL Password: *****

Test Connection

SmartConnect Database

SmartConnect Database: SmartConnect_21_saas

SmartConnect User: SmartConnect_21_saas

SmartConnect Password: *****

SmartConnect User

Existing User Create New User

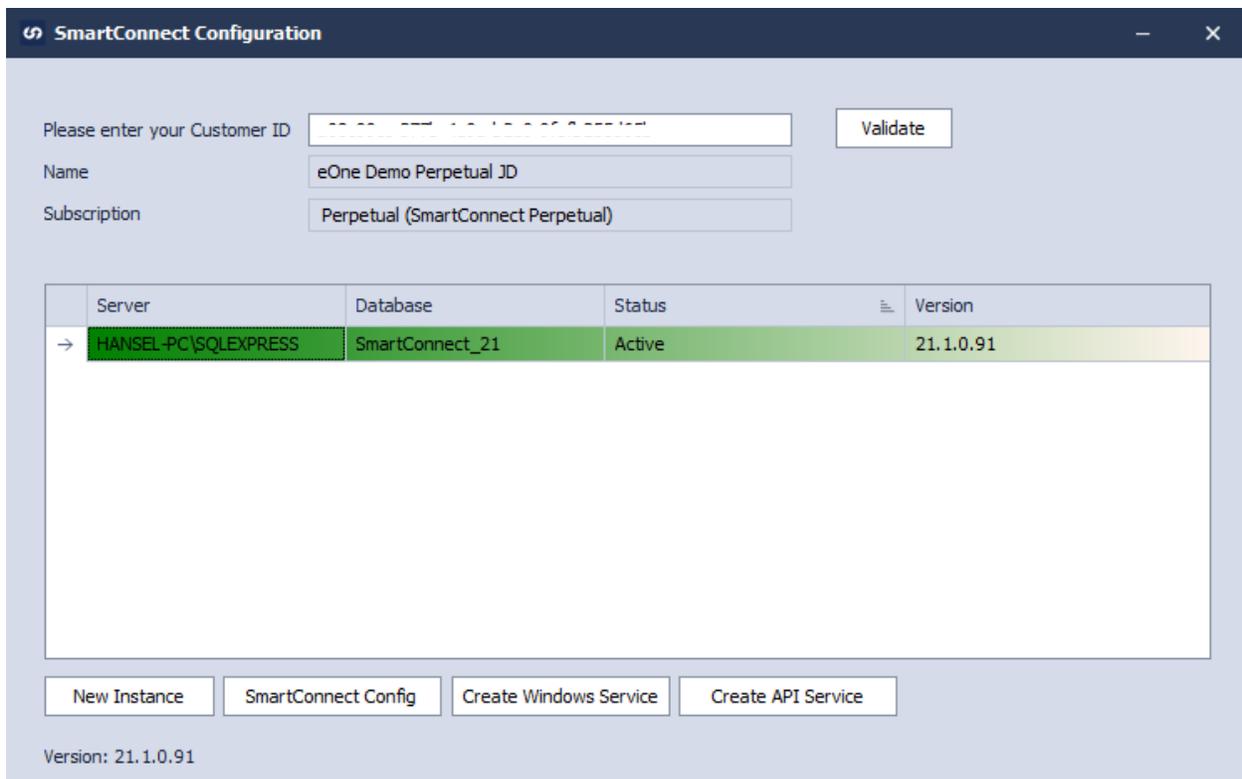
Existing User: jared.dux@eonesolutions.com

First Name: Jared

Last Name: Dux

When adding or using an existing user with a subscription license, the user email is stored in the online SmartConnect user database. This will allow for those users to have access to both the on-premise deployment of SmartConnect along with the SmartConnect.com environment that the subscription gives access to.

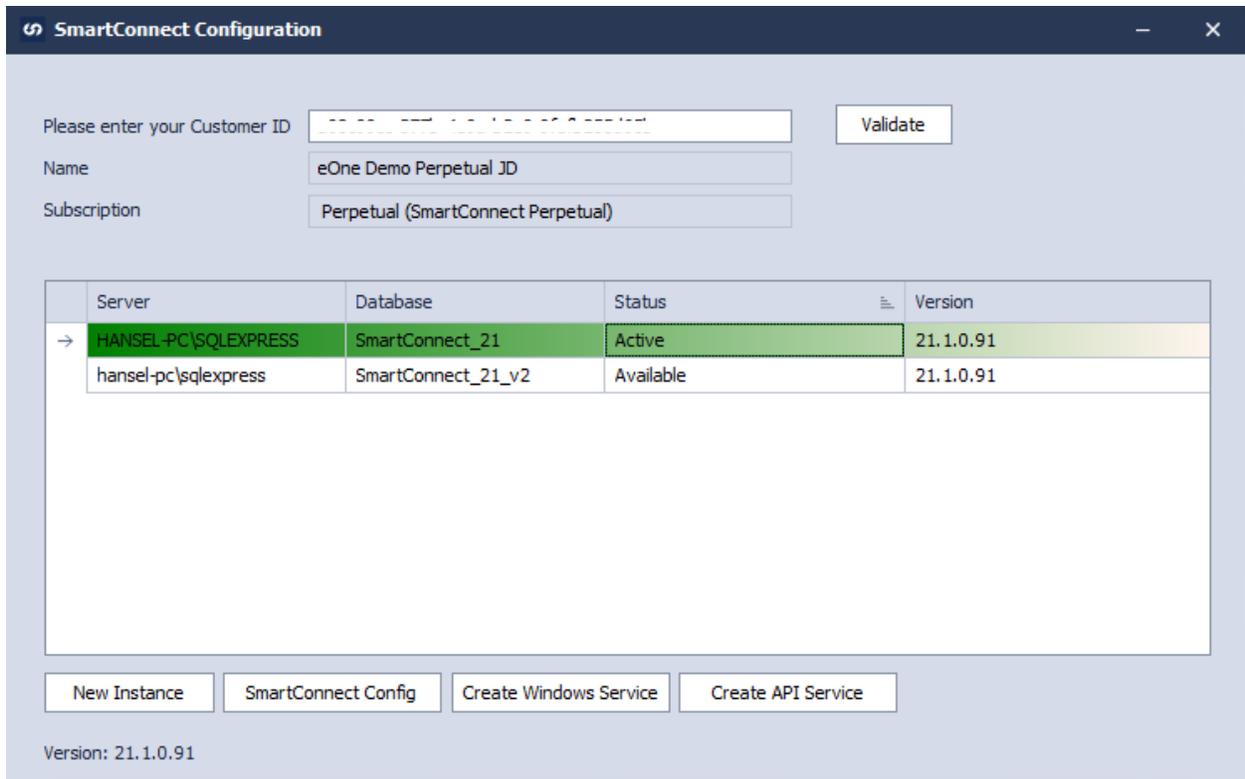
Once the New Instance window is saved, that instance will be added to the list in the main configuration window and will be marked as Active. At this point, the configuration window could be closed and the SmartConnect application would allow a login to that environment.



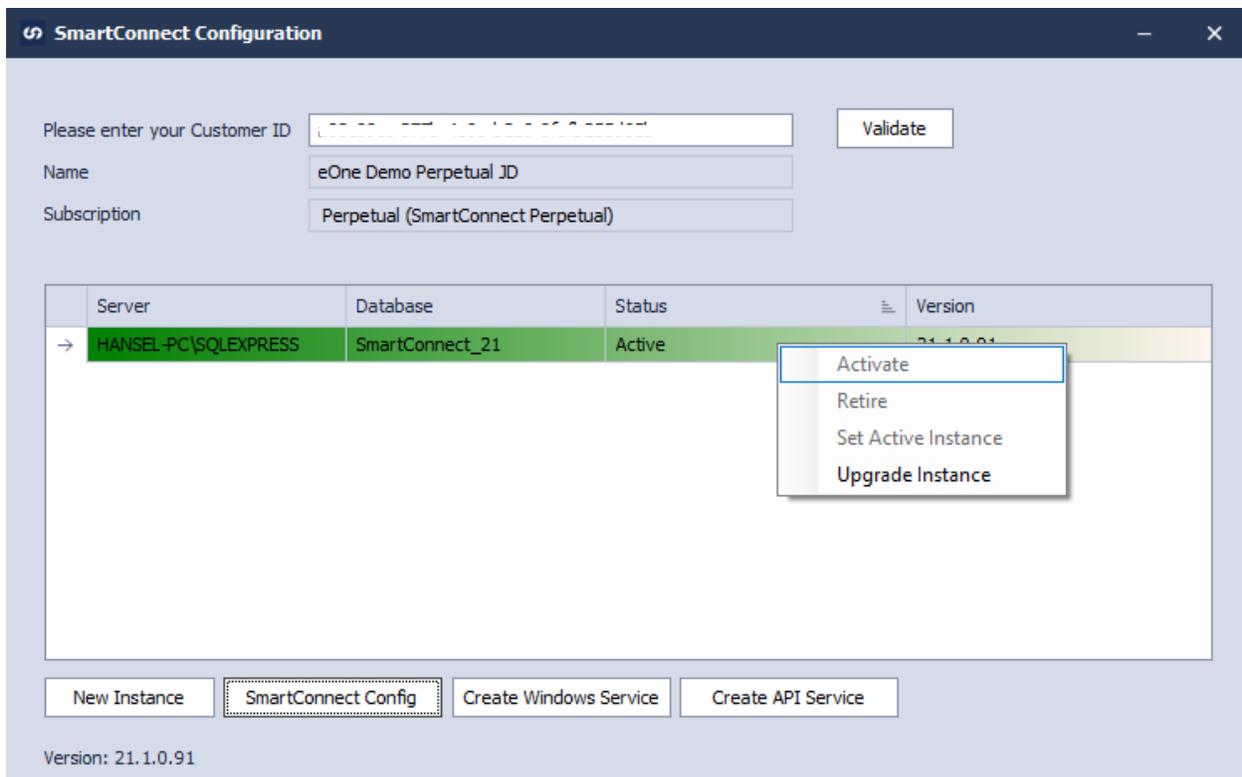
Additional setup can be performed around the windows and API service components, or other SmartConnect instances can be registered and configured. Those options will be detailed in the remainder of the document.

Additional instances can be setup within the configuration tool for a specific account. Up to 3 (or 4, depending on region) instances can be created to support development, testing/UAT, and production environments. These additional instances can be setup on the same SQL server or can be created on entirely different SQL servers by running the install and configuration tool in a separate environment.

When multiple instances are setup, the list will contain each and have them defined as Active, Available or Retired in the status field.



The configuration tool will then let you define which instance the SmartConnect application will connect to when a user launches it. Right-clicking on the instance in the list will bring up the available actions.



- Activate
 - If an instance is retired, this will re-activate the instance for use. This can only be done if account is not at the instance limit, and the configuration tool has access to that server and database from the current workstation.

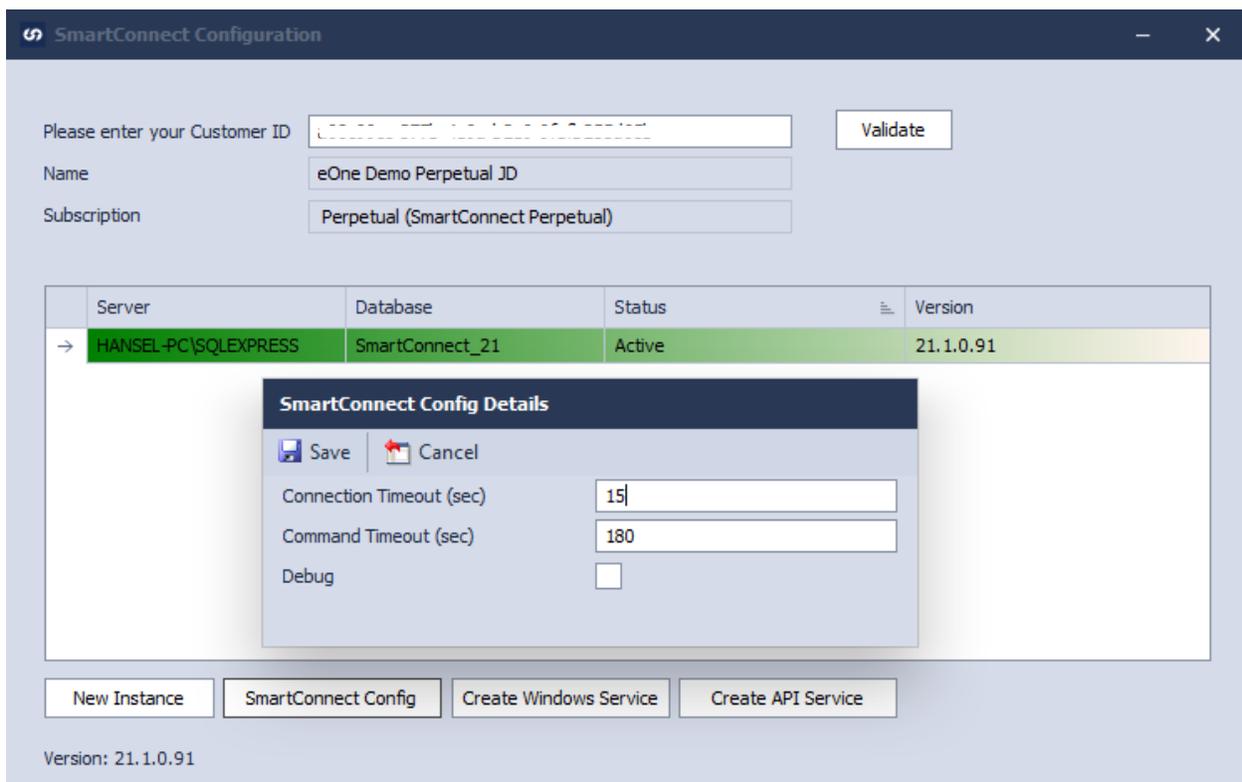
- Retire
 - Removes the instance from use. Users will no longer be able to log into that instance through any application still connected to it, and automated integrations will no longer process. Effectively disables that instance from any production use. Most frequently used when migrating SmartConnect to a different server, or if multiple test environments are in use.

- Set Active Instance
 - Any instance listed as Available for the status and that the configuration tool can access from the current workstation can be set to the active instance. Only one active instance can exist at any given time on a workstation. This can be used to switch the application to log into a test, development, UAT instance without needing to have the application installed on multiple workstations.

- Upgrade Instance
 - o Any active or available instance that the configuration tool can access from the current workstation will be updated to the version of the configuration tool (if more recent than the instance version). The next login to that instance through the application will complete the upgrade process by running system maintenance.

When performing a new instance in an environment that does not have an instance setup yet, the New Instance button should be used on the first workstation SmartConnect is installed on. If SmartConnect is installed on additional workstations that should be connecting to the same instance, the instance should simply be set to the active instance after entering the customer ID in the configuration tool on the additional workstations.

The buttons across the bottom of the configuration tool allow for additional components and settings to be enabled. The SmartConnect Config button allows for some basic application settings to be modified. For most clients, these settings should not have to be modified from their original values.



- Connection Timeout
 - o The length of time (in seconds) that the SmartConnect application will wait while trying to establish a connection.

- Command Timeout
 - o The length of time (in seconds) that the SmartConnect application will wait while trying to execute a command within an open connection.

- Debug
 - o This option will be flagged if the debug options are enabled in either the windows service or API service. This should not be left on for normal production use unless in the process of troubleshooting an issue for one of those components.

The Create Windows Service button will install and activate the SmartConnect windows service on the current workstation for the current active SmartConnect instance. This service handles any scheduling requirements from the SmartConnect application. The service should be installed on workstations that do not have much downtime, as the service can not execute integrations if the workstation is not active.

Windows Service	
Service Name	SmartConnectService
Service User	chrishanson
User Password	*****
Domain	hansel-pc
Validate Credentials	
Connection Timeout (sec)	15
Command Timeout (sec)	180
Debug	<input type="checkbox"/>
WindowsService ThreadTime Out (min)	240
Factory Refresh Interval (min)	720
Change Maintenance Interval (min)	1440
Log Maintenance Interval (min)	1440
WebLog Maintenance Interval (min)	1440
Folder Realtime Interval (min)	1
WebService Security Interval (min)	10

The majority of the settings on the Windows Service window should be left at the default values, unless working with a certified support team to modify them for a particular environment. Any option after the Validate Credentials button should generally be left at the default values.

The buttons across the top of the window will perform different actions based on the current settings.

- Save
 - Saves the current configuration and creates the windows service if it is not present yet. Only available once the credentials have been validated for the service.
- Cancel
 - Cancels any changes made to the window since opening it.
- Start
 - Starts the current windows service the configuration is tied to for the active instance. Applies to the current workstation.
- Stop
 - Stops the current windows service the configuration is tied to for the active instance. Applies to the current workstation.
- Remove
 - Removes the windows service from the current workstation that the configuration is tied to.

The settings within the window allow for the service to be configured to install and run scheduled processes.

- Service Name
 - The name of the windows service. Can be changed to differentiate multiple services on one workstation from another in the scenario where multiple SmartConnect instances are switched between. For most scenarios, the default name can be left in place.
- Service User
 - The windows account that the windows service will run under. Must be an account with local admin rights to log any errors to the event viewer.
- User Password
 - The password for the account used to run the service.
- Domain
 - The domain for the account used to run the service.

- **Validate Credentials**
 - Will validate the account information entered can connect and create a windows service correctly. Validation must pass before the windows service can be saved and created.
- **Connection Timeout**
 - The length of time (in seconds) that the SmartConnect application will wait while trying to establish a connection.
- **Command Timeout**
 - The length of time (in seconds) that the SmartConnect application will wait while trying to execute a command within an open connection.
- **Debug**
 - Will enable debug logs to be written to the SmartConnect directory. Should not be left on for production environments unless troubleshooting an issue with scheduled processes.
- **Windows Service Thread Timeout**
 - How long the windows service will leave an integration running before terminating the process. Prevents integrations from becoming perpetually locked in the scheduler if something fails.
- **Factory Refresh Interval**
 - The period of time between the scheduler creating a new session with the SmartConnect database.
- **Log Maintenance Interval**
 - How frequently the service will check to remove log entries that should no longer be stored in SmartConnect.
- **Web Log Maintenance Interval**
 - How frequently the service will check to remove web service log entries that should no longer be stored in SmartConnect.
- **Folder Real-Time Interval**
 - How frequently the service will check folder data source real time events to pick up new files for processing. Should not be set to less than 1 minute.
- **Web Service Security Interval**
 - How frequently the service will check for alerts within the security logging for the SmartConnect API.

The Create API Service button will install and activate the SmartConnect API on the current workstation for the current active SmartConnect instance. The workstation must have the IIS feature enabled in Windows in order for SmartConnect to be able to create and publish the SmartConnect API. The SmartConnect API should only be installed on one workstation for any particular SmartConnect instance, and not across multiple workstations.

The SmartConnect API is used for any real-time data sources or triggers, any use of the Excel Add-in or Excel Templates that allow users to run integrations directly from Excel, or any third-party system that calls into SmartConnect to run an integration on demand.

API Service	
Service Name	SmartConnectWcf
Port Number	5557
Service User	chrishanson
User Password	*****
Domain	hansel-pc
<input type="button" value="Validate Credentials"/>	
API Connection Timeout (sec)	15
API Command Timeout (sec)	180
API Debug	<input type="checkbox"/>

The buttons across the top of the window will perform different actions based on the current settings.

- Save
 - o Saves the current configuration and creates the web service (API) if it is not present yet. Only available once the credentials have been validated for the service.
- Cancel
 - o Cancels any changes made to the window since opening it.
- Start
 - o Starts the current web service (API) the configuration is tied to for the active instance. Applies to the current workstation.
- Stop
 - o Stops the current web service (API) the configuration is tied to for the active instance. Applies to the current workstation.

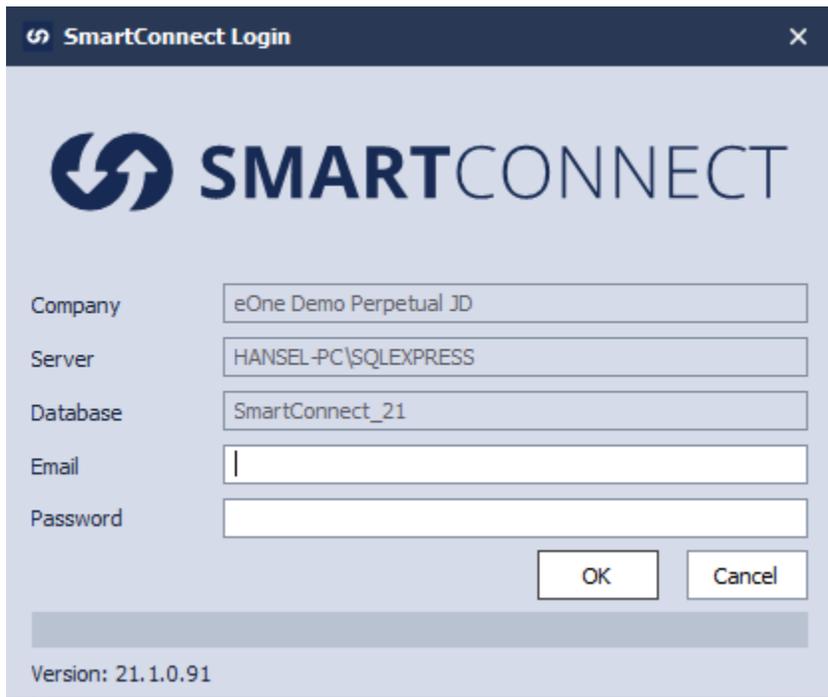
- Remove
 - Removes the web service (API) from the current workstation that the configuration is tied to.

The different options allow the SmartConnect API to be configured during the setup process.

- Service Name
 - The name of the web service (API) that will be published. Can be changed to differentiate multiple services on one workstation from another in the scenario where multiple SmartConnect instances are switched between. For most scenarios, the default name can be left in place.
- Port Number
 - The port that the web service (API) will run under. Can be changed to any valid port within IIS and the environment. Useful for configuring a secure port for the API if opening to external access outside of the client network.
- Service User
 - The windows account that will create and managed the web service (API). Must be an account with local admin rights to log any errors to the event viewer.
- User Password
 - The password for the account used to run the service.
- Domain
 - The domain for the account used to run the service.
- Validate Credentials
 - Will validate the account information entered can connect and create a windows service correctly. Validation must pass before the windows service can be saved and created.
- API Connection Timeout
 - The length of time (in seconds) that the SmartConnect API will wait while trying to establish a connection.
- API Command Timeout
 - The length of time (in seconds) that the SmartConnect API will wait while trying to execute a command within an open connection.

- API Debug
 - o Will enable debug logs to be written to the SmartConnect directory. Should not be left on for production environments unless troubleshooting an issue with API processes.

Once the configuration process is complete – at the bare minimum selecting an active instance to connect to for the workstation – the configuration window can be closed. The main SmartConnect application can then be launched, and users will be prompted for the account used on the instance for the initial login. Once logged in, additional users can be added and configured.



The image shows a Windows-style dialog box titled "SmartConnect Login". At the top left is a refresh icon and the title "SmartConnect Login", and at the top right is a close "X" button. Below the title bar is the SmartConnect logo, which consists of two circular arrows forming a square, followed by the text "SMARTCONNECT" in a bold, sans-serif font. The dialog contains five input fields: "Company" with the text "eOne Demo Perpetual JD", "Server" with "HANSEL-PC\SQLEXPRESS", "Database" with "SmartConnect_21", "Email" which is empty, and "Password" which is empty. At the bottom right are two buttons: "OK" and "Cancel". At the bottom left, there is a version string: "Version: 21.1.0.91".

The Company, Server and Database will all default in from the active instance. If a login to another instance is needed, the application must be closed on that workstation and the configuration tool launched again. From there a new active instance can be set and the login will reflect the changes on the next launch of the application.