



BDNA Data Platform User Console 5.5

Installation Guide

Legal Information

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BDNA User Console Installation Overview

Welcome to the BDNA User Console *Installation and Configuration Guide*. This guide contains all the information you need to install, configure, and troubleshoot the BDNA User Console™. This guide contains the following chapters:

- [Installing BDNA User Console](#)
- [BDNA User Console Installation Overview](#)
- [BDNA User Console Configuration Wizard](#)
- [Offline Installation of Prerequisites](#)
- [Known Issues](#)



Note • Additional Information and Configuration

This installation guide is intended for the full installer of 5.5.0. There is a patch set upgrade option for 5.5.0 as well. For further details on the 5.5.0 patch set, please see the User Console Release Notes for 5.5.0.

About BDNA User Console

The BDNA User Console provides a central control mechanism from which to access and consume BDNA data. It integrates and centralizes the searching, browsing, and reporting of Technopedia and Normalize data. Depending on your licensing agreement, the User Console is comprised of the following:

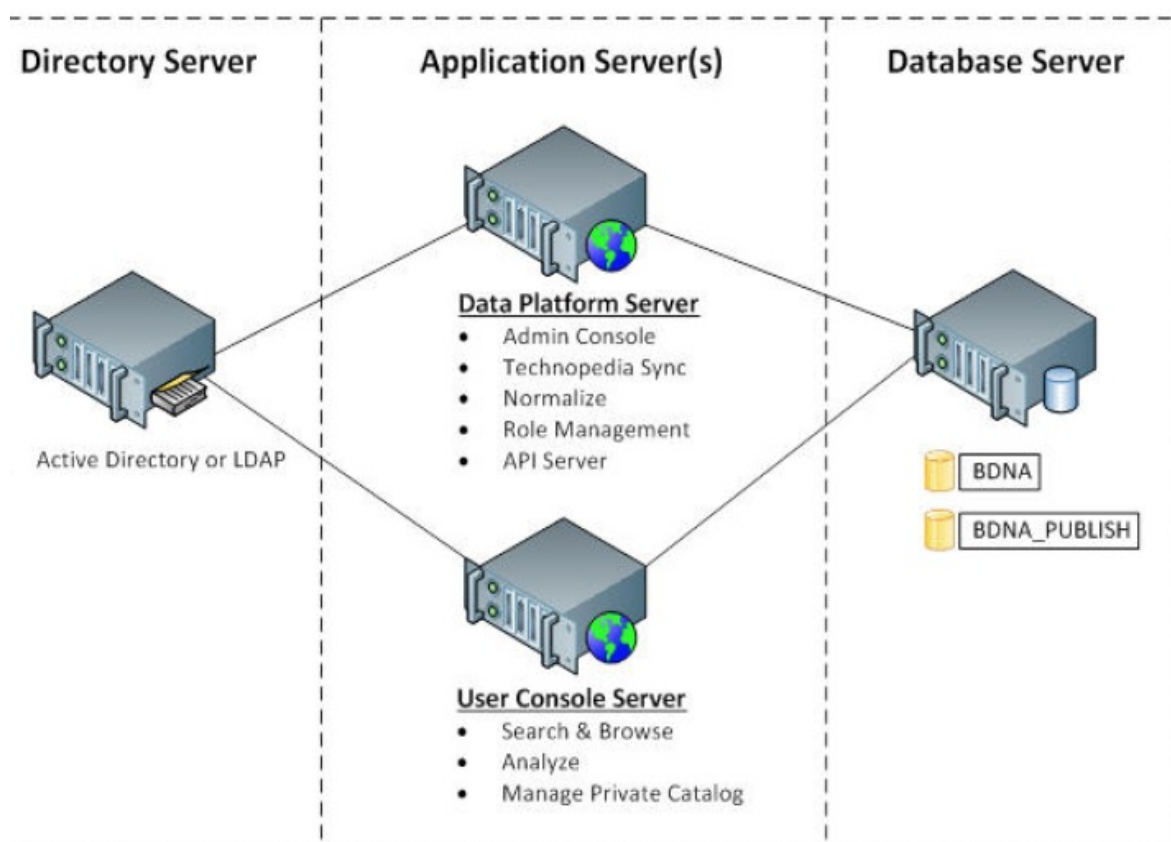
- Search and browse—Search Technopedia data and view normalized systems and BDNA Analyze reports through a single interface.
- Integrated analytics—BDNA Analyze is tightly integrated with the new search functionality. You can start an analysis immediately after finding Technopedia and Normalize data through search and browse. When viewing a report, you can right-click a Technopedia entry and go to the User Console detail page for detailed information about the object. In addition, the following design changes have been made:
 - Combined DB—The Publish and Data Warehouse databases are merged for enhanced performance.
 - The DW Star Schema will be populated based on the activation of Analyze.

- BDNA Analyze runs on top of Publish DB
- Private Catalog—A component of the User Console that provides you with the following functionality:
 - Update Technopedia public data with custom data. For example, update the price of software
 - Create and manage privately-defined catalog objects.
 - Create and track applications that you have developed internally.

Deploying the BDNA User Console

A typical deployment of the BDNA Data Platform and the BDNA User Console is shown in Fig 1-1 . For small to medium-sized environments, both the Data Platform and User Console servers can be deployed on a single server and operating system. For enterprise installations, BDNA recommends installing the Data Platform and User Console on separate servers.

Figure 1-1: Typical BDNA Data Platform and User Console deployment



System Requirements

Software

Table 1-1 •

OS/Apps	Supported Types/Versions
Operating Systems ^a	<ul style="list-style-type: none"> Windows Server 2012™ Windows Server 2012 R2™
Databases ^a	<ul style="list-style-type: none"> MS SQL Server 2012™ (Standard Edition) MS SQL Server 2014™ (Enterprise, Standard and Express Editions) Oracle 11gR2 Enterprise Edition™. Oracle 12c Enterprise Edition™^{b c}
Browsers	<ul style="list-style-type: none"> Windows Internet Explorer™ v11^d or later Google Chrome™ v44 or later Mozilla Firefox™ v37 or later

a. Support for Operating Systems and Databases in English language only.

b. Oracle 12c has known issues when running in a Windows environment. As of the publish date of this document, Oracle has not provided a patch to correct the issues.

c. Set redo log file size to 256 MB; set redo log group to 4.

d. Use Internet Explorer v11 in compatibility mode only.

Hardware

Table 1-2 •

Environment ^a	Data Platform Server	User Console Server	Database Server
Small (up to 2,000 devices)	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 2 cores ● RAM: 4 GB ● Storage capacity: 20 GB free space ● Network connection: Gigabit ● Disk I/O: 80 MB/sec 	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 2 cores ● RAM: 8 GB ● Storage capacity: 20 GB free space ● Network connection: Gigabit ● Disk I/O: 80 MB/sec 	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 2 cores ● RAM: 16 GB ● Storage capacity: 50 GB free space ● Network connection: Gigabit ● Disk I/O: 80 MB/sec
Medium (up to 50,000 devices)	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 4 cores ● RAM: 8 GB ● Storage capacity: 100 GB free space ● Network connection: Gigabit ● Disk I/O: 80 MB/sec 	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 4 cores ● RAM: 16 GB ● Storage capacity: 100 GB free space ● Network connection: Gigabit ● Disk I/O: 80 MB/sec 	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 4 cores ● RAM: 32 GB ● Storage capacity: 350 GB free space ● Network connection: Gigabit ● Disk I/O: 150 MB/sec
Large (up to 300,000 devices) ^b	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 8 cores ● RAM: 16 GB ● Storage capacity: 200 GB free space ● Network connection: Gigabit ● Disk I/O: 80 MB/sec 	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 8 cores ● RAM: 32 GB ● Storage capacity: 200 GB free space ● Network connection: Gigabit ● Disk I/O: 80 MB/sec 	<ul style="list-style-type: none"> ● CPU: Xeon ES-2630 or similar, 8 cores ● RAM: 64 GB ● Storage capacity: 1.5 TB free space ● Network connection: Gigabit ● Disk I/O: 250 MB/sec

a. In addition to planning system requirements for your environment based on data volume, you should also take the number of expected concurrent users into consideration when determining system requirements for the BDNA User Console. BDNA recommends adhering to the following guidelines:

Fewer than 5 concurrent users—Use system requirements shown for Small environments.

Between 5 to 10 concurrent users—Use system requirements shown for Medium environments.

Between 10 to 20 concurrent users—Use system requirements shown for Large environments.

More than 20 concurrent users—Contact the BDNA Services team.

- b. For environments with more than 300,000 devices please contact the BDNA Services team.

Network Ports and Protocols

Table 1-3 •

Port	Server	Protocol	Usage
80 (default), 443	Application	HTTP, HTTPS	IIS (User Console)
8084 (default)	Application	TCP	Remote communication between BDNA application servers
389 (typical), 636	LDAP/AD Server	LDAP, LDAPS	Directory Services
1433 (typical)	Database Server	TCP	BDNA database (MSSQL)
1521 (typical)	Database Server	TCP	BDNA database (Oracle)



Note • Port 8023 (for Apache Tomcat) and port 3306 (for MySQL) are used internally by BDNA User Console.

Requirements for Installing and Integrating BDNA User Console Components with BDNA Data Platform Components

- The BDNA User Console has been designed to work only with BDNA Data Platform 5.5. You cannot integrate an earlier version of BDNA Analyze with BDNA Data Platform 5.5.
- Successful installation of User Console requires an existing Publish database. Therefore, you cannot install BDNA User Console before installing BDNA Data Platform.
- Deployment of the User Console, and integration with BDNA Data Platform 5.1, requires one of the following databases:
 - MS SQL Server 2012 (Standard Edition)
 - MS SQL Server 2014 (Standard Edition)
 - MS SQL Server 2016 (Standard Edition)
 - Oracle 11gR2 Enterprise
 - Oracle 12c Enterprise Edition

Requirements for Using BDNA User Console with Oracle Database

- You must set the Oracle server environment parameter “processes” to a value of 300 or higher.
- BDNA recommends a DB_BLOCK_SIZE setting for the Publish database in the range of 16 KB to 64 KB for improved scalability and performance.

Security Requirements

This section lists the minimal security settings required to install (and uninstall) BDNA User Console.

Windows Account Privileges

On the server running BDNA User Console setup, the user must be a member of the following group:

- Local administrators

Creating a New BDNA User Console Database

If you choose the “Create new BDNA User Console database automatically” option during installation, the SQL login user account that you specify must have the privileges described in this section.

When using SQL authentication for creating the BDNA User Console database, the SQL user must be granted the following SQL Server roles:

- dbcreator
- securityadmin
- public

When using Windows authentication to create the BDNA User Console database, the Windows user must be granted the following SQL Server roles:

- dbcreator
- public



Note • If you use Windows Authentication, the Windows account is used to run the BDNA User Console Windows service. Therefore, you must verify that the Windows account has the necessary privileges to run a Windows service on the application server.

Using an Existing BDNA User Console Database

If you choose the “Use existing BDNA User Console database” option during installation, the SQL login user account that you specified must have the privileges described in this section.

For server roles settings, the user must be granted the following server-wide security privileges:

- public

For user mapping settings, the user must have the following database role membership for the BDNA User Console database:

- db_owner
- public

Installing BDNA User Console

Before You Begin the BDNA User Console Installation

This chapter provides detailed instructions for installing the BDNA User Console. Once you have installed the BDNA User Console for the first time, subsequent installations of BDNA User Console will bypass the initial download and installation of prerequisite software and proceed directly to the Configuration Wizard.

This section contains important information that you should be aware of before beginning the User Console installation process.

Once you have installed the BDNA User Console for the first time, subsequent installations of BDNA User Console will bypass the initial download and installation of prerequisite software and proceed directly to the Configuration Wizard, as described in [BDNA User Console Configuration Wizard](#).

If you are upgrading from a previous version to version 5.5.0 (for example, from 5.3x or 5.4x), please see the “BDNA Normalize Migration Wizard Process” first as you will have to backup your settings before making a fresh installation to 5.5.0. The BDNA Normalize Migration Wizard process also outlines how to restore backed up settings after completing your installation of 5.5.0.



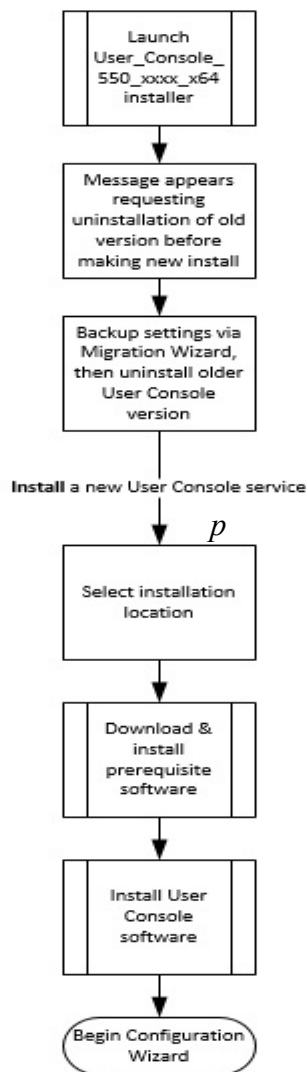
Note •

Analyze customers should contact the BDNA Support Team (<https://bdna.service-now.com/support/>) regarding license key requirements for upgrading to BDNA User Console 5.5.0.

User Console installation time may increase if anti-virus or anti-malware programs, such as Windows Defender, are running

real-time protection operations on the User Console server. To avoid this impact, add the User Console installation directory and the User Console installer file to the exception portion of the AV program.

Figure 2-2: Installation Workflow



Understanding the BDNA User Console Installation Process

The BDNA User Console installation is a two-part process. The first part of the process begins when you launch the User Console 550 <xxx> x64.exe installer. The second part of the process begins when the Configuration Wizard launches immediately after the installer process finishes.



Note • To launch the installer, right-click the icon labeled *User Console 550 <xxx> x64.exe* and select “Run as administrator” from the context menu. When installing the User Console, please only use the latest 5.5 installer in order to properly integrate with the 5.5 Data Platform.

During the first part of the installation process, the installer determines the software packages that are needed to proceed with the installation. The installer then downloads and installs the software packages. When this part of the process is complete, the Configuration Wizard takes over. It guides you step-by-step, through a process that shows you how to configure the BDNA User Console.

Download and installation of the prerequisite software packages can either be done automatically, provided you have Internet access, or manually if the system you are using does not have Internet access. For more information about offline installation, see [Offline Installation of Prerequisites](#).

Offline Installation of BDNA User Console Prerequisite Software Packages

For most installations, the BDNA User Console installer will download all necessary prerequisite software from the Internet. To accomplish this, the installer must have Internet access. If Internet access is not available, the installation process will abort.

If you do not have Internet access, you can download the necessary prerequisite software on a different system, and then copy it onto the BDNA User Console server. As long as the installer detects that the necessary software packages have been installed on the target system, the installation process will proceed to completion. A comprehensive list of prerequisite software can be found in [Offline Installation of Prerequisites](#).

Subsequent Installations of the BDNA User Console

The first time you launch the BDNA User Console installer, the installer determines the software packages that are necessary to proceed with the installation. For subsequent installations, this part of the install process is skipped, and you begin the process from the Configuration Wizard. For detailed information about using the Configuration Wizard, refer to [BDNA User Console Configuration Wizard](#).

Configuring BDNA Data Platform Before the BDNA User Console

You must finish the BDNA Data Platform Configuration Wizard before you begin the BDNA User Console installation and configuration process. Specifically, the BDNA User Console Configuration Wizard will fail if it cannot verify the existence of the BDNA Data Platform Publish database, which is configured with the BDNA Data Platform Configuration Wizard. Refer to the *BDNA Data Platform 5.5 Installation and Configuration Guide* for more detailed information.

Upgrading your Current Analyze Installation

The BDNA User Console installer can automatically detect a currently installed version of the BDNA User Console service. Upgrades to 5.5 are done via a fresh install of the User Console.



Note • Before upgrading, Flexera strongly recommends that you back up your existing Normalize, Publish, and Data Warehouse databases.

Launching the BDNA User Console Installer

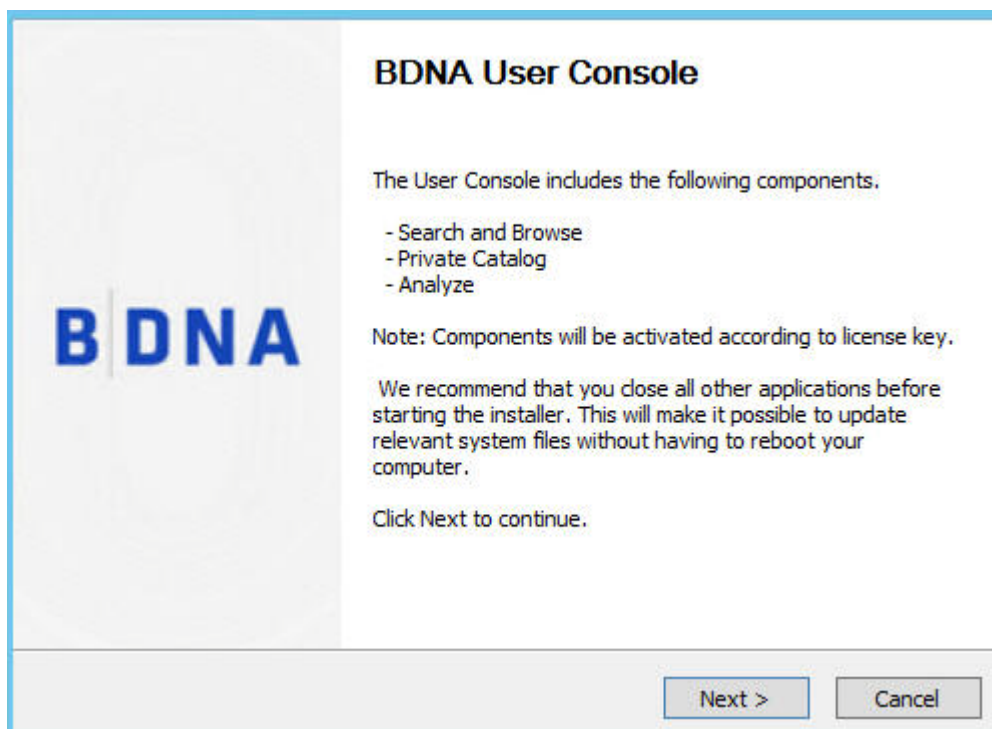


Task

To run the installer:

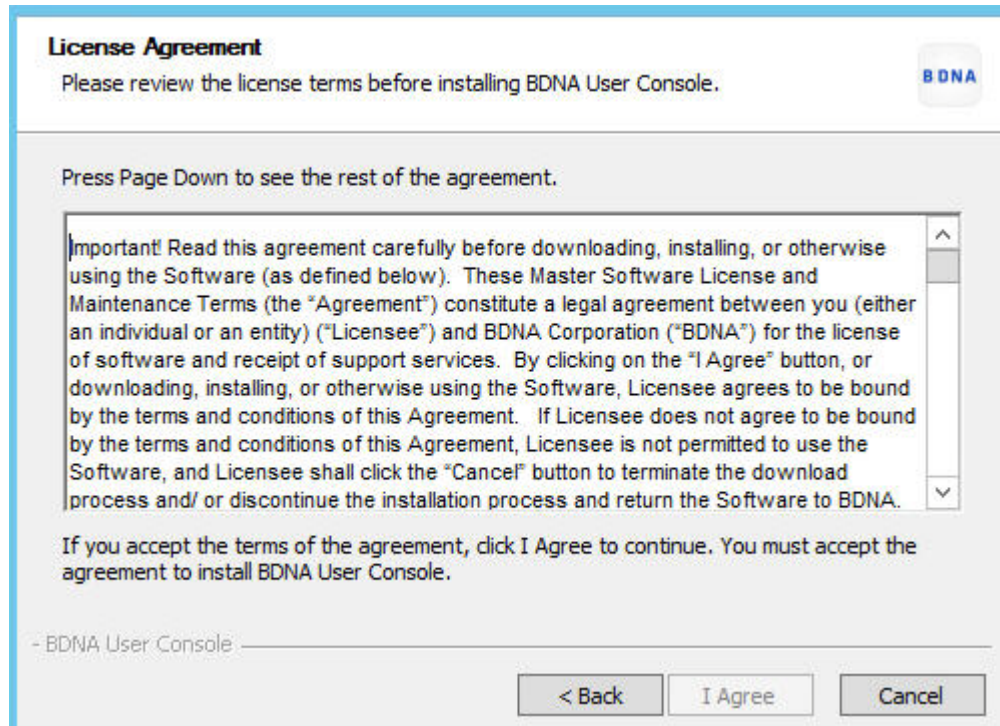
1. Download User Console 550 <xxx> x64.exe via Internet access (<https://bdna.service-now.com/support/downloads.do>). (You must be a local administrator to run the installer.) Right-click User Console 550 <xxx> x64.exe and select “Run as administrator” to launch the installer. The first screen you see is the Welcome screen. Click Next to continue.

Figure 2-3: Welcome screen



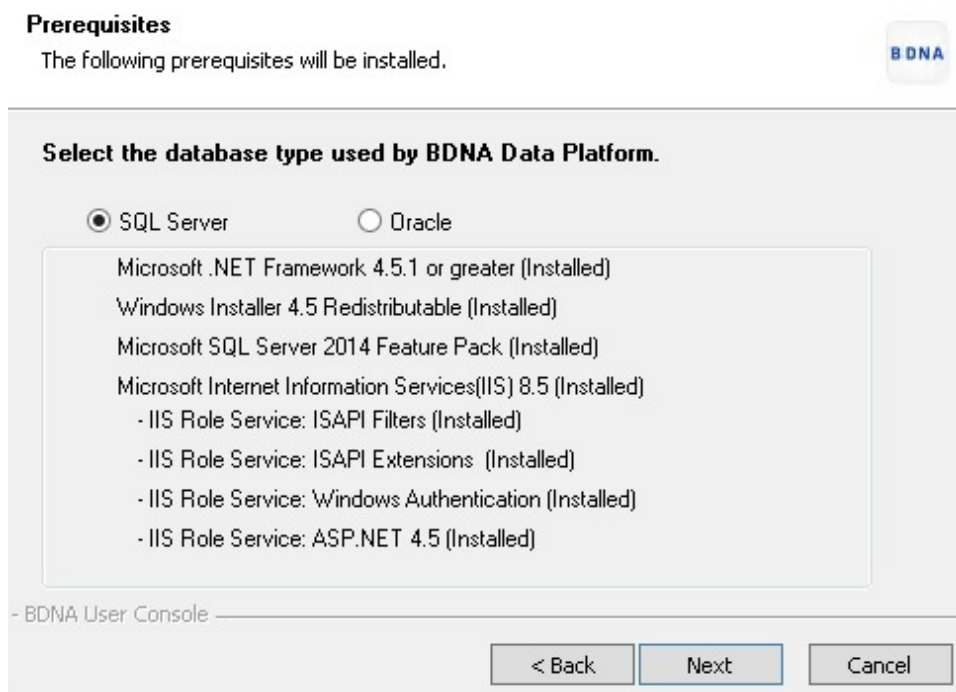
2. The next dialog is the BDNA User Console End-user License Agreement. You must scroll through the entire license agreement to activate the I Agree button. If you agree with the License Agreement, click "I Agree" to continue the installation.

Figure 2-4: End-user License Agreement



3. The next screen shows you the prerequisite software that is loaded by the installer. The installer will download any prerequisites that you do not already have installed. The system checks for required disk space and disables the next button if the space requirement fails.

Figure 2-5: Figure 2-4 Installation Prerequisites



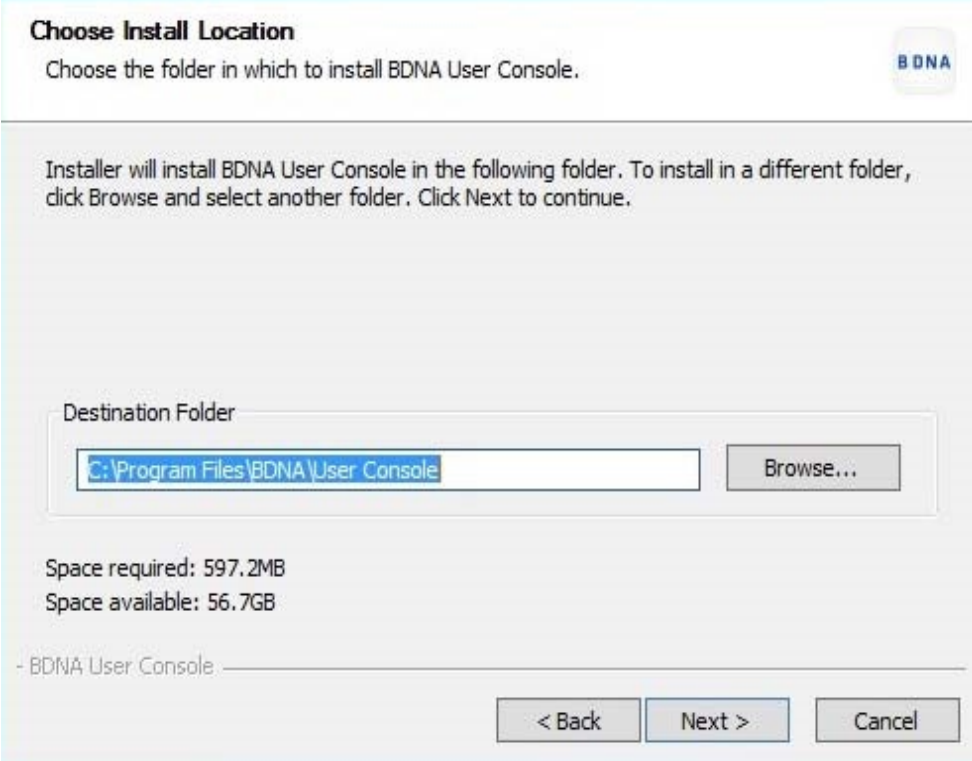
4. Select the appropriate option and click Next to proceed with the installation.



Note • When finished, you must run a catalog sync on the Administration Console of the BDNA Data Platform to update the Analyze subscription and catalog data in the User Console.

5. The next dialog allows you to specify the location of the installed files. You can accept the default location or specify a new location in the Destination Folder entry field. Click Next to continue the installation.

Figure 2-6: Figure 2-5 Install Location



Choose Install Location

Choose the folder in which to install BDNA User Console.

Installer will install BDNA User Console in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.

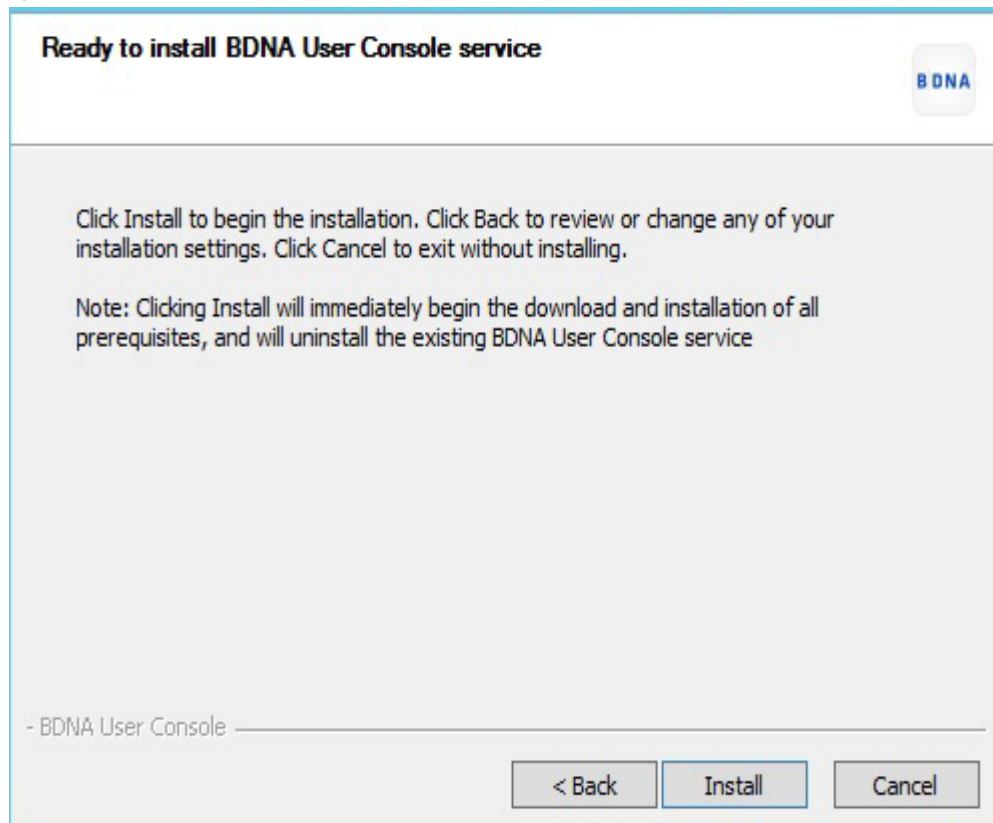
Destination Folder

Space required: 597.2MB
Space available: 56.7GB

- BDNA User Console -

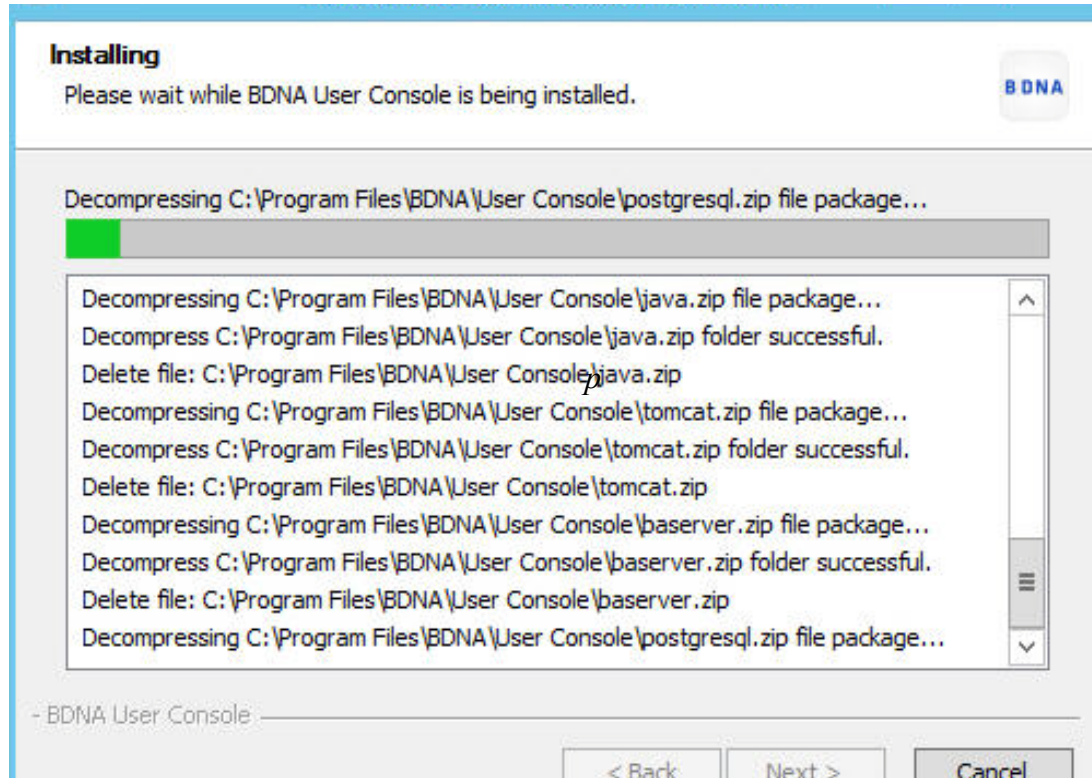
6. The next screen that opens is a status-ready screen. Click Install to begin the download and installation of the necessary prerequisites.

Figure 2-7: Ready to install



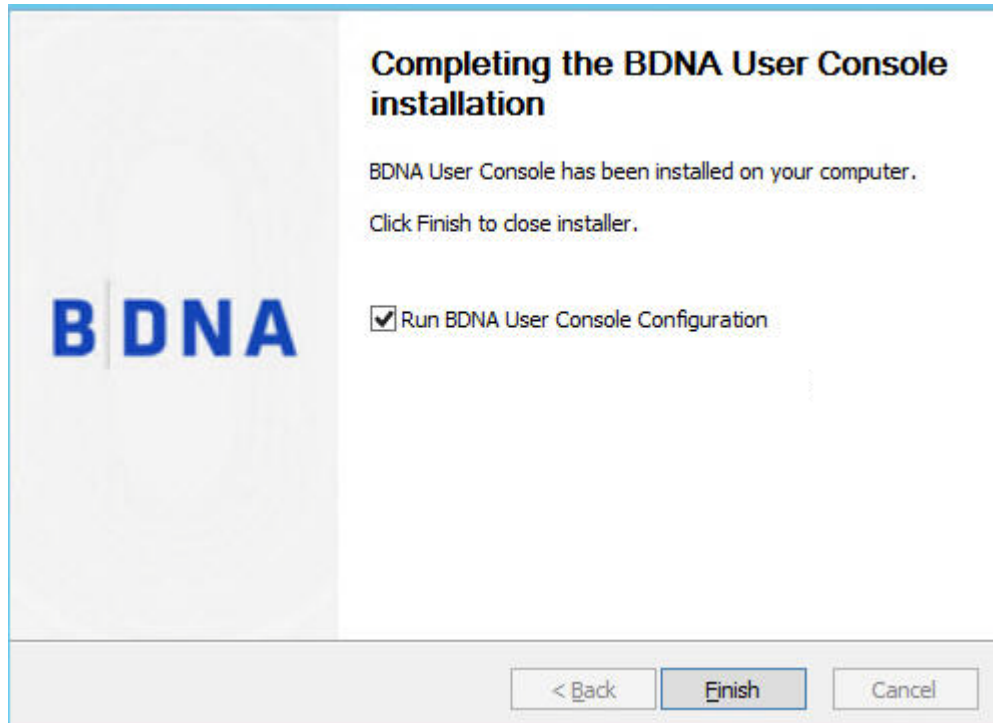
7. The next dialog shows the progress of the download and install. Click Next when the download portion of the install process is complete.

Figure 2-8: Installing User Console



8. The Completing the BDNA User Console Installation dialog opens when the install portion of the process is complete. Leave the checkbox checked next to Run BDNA User Console Configuration Wizard to continue the setup process. You can also open the BDNA User Console documentation portal, which provides links to the BDNA User Console documentation library.

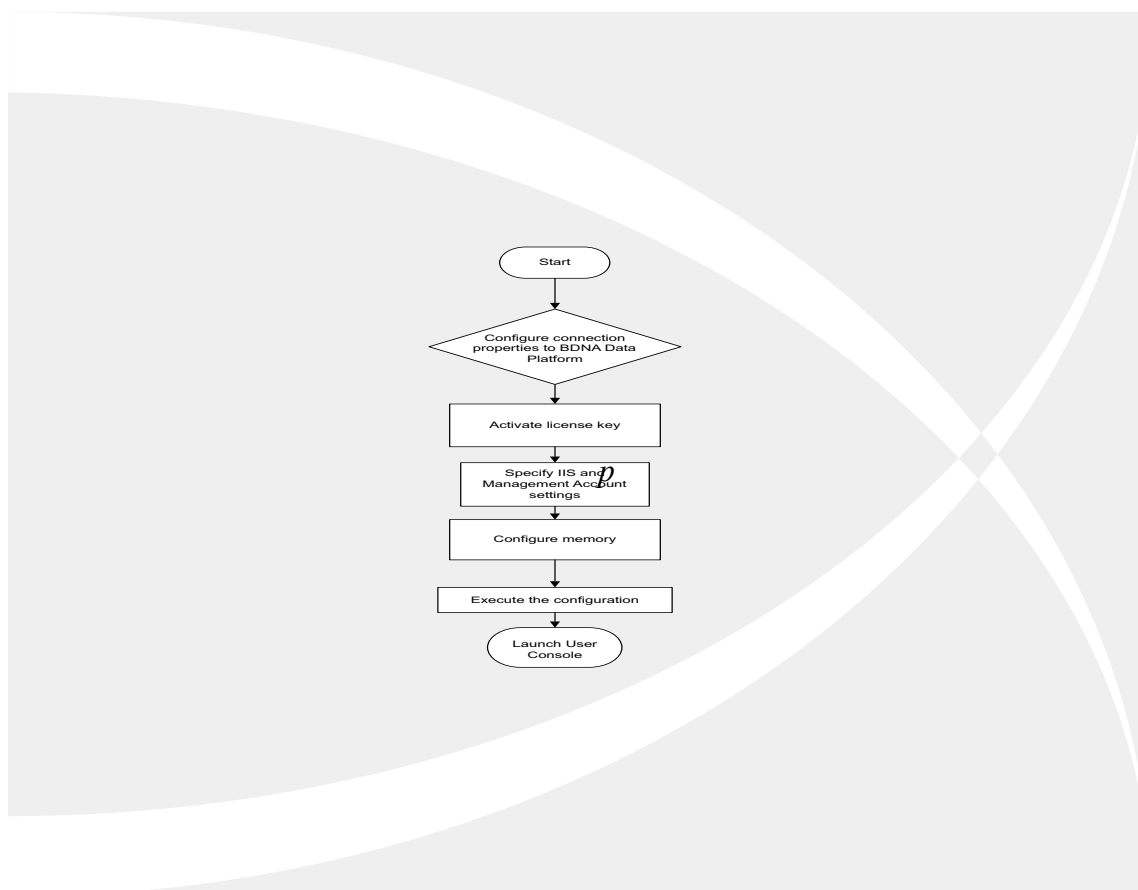
Figure 2-9: Completing the install



BDNA User Console Configuration Wizard

When the installer finishes downloading and installing all necessary software packages, the Configuration Wizard takes over the installation process. The sections that follow contain step-by-step instructions for using the Configuration Wizard.

Figure 3-8: Configuration Wizard workflow



Configuration Wizard

The Configuration Wizard launches immediately after the initial installation is completed.

For subsequent setup following an initial installation, you can proceed directly to the Configuration Wizard. Start the wizard from the Windows Start menu, or locate the wizard at:

<Installed Path>\Program Files\BDNA\BDNA User Console\Bin\Configuration Wizard.exe

You double-click the file to launch the configuration wizard.



Note • Be sure to run the Configuration Wizard for BDNA User Console after every re-configuration of the BDNA Data Platform you perform.

Table 3-1 shows you each step in the configuration process and what information/input you will need to provide during the process.

Table 3-1 • Configuring BDNA User Console

Configuration Step	Description
1. Register license key.	Requires local access to license key file.
2. Configure connection properties to BDNA Data Platform.	Enter connection settings.
3. License Key activation	Load and register BDNA User Console activation key.
4. Specify IIS and Management Account settings	Specify IIS website host for User Console and settings for management user.
5. Configure memory allocation	Specify the maximum memory that can be allocated to the User Console components.
6. Execute the installation.	Requires user input.
7. Complete the installation and open the BDNA User Console.	Requires username and password.

Using the Configuration Wizard

After the initial installation is finished, the Configuration Wizard launches automatically. You can also launch the wizard at a later time by locating and running the Configuration Wizard.exe file. (Always launch the Configuration Wizard as an administrator. To launch the Configuration Wizard as an administrator, right-click the Configuration Wizard.exe file and select “Run as administrator” from the context menu.)



Task

To configure BDNA User Console using the Configuration Wizard:

1. The first screen you see is the Welcome screen, showing the tasks that you will complete during the configuration process.

Figure 3-9: Welcome to the BDNA User Console Configuration

Welcome to the BDNA User Console Configuration

You will be able to complete the following tasks:

- Connect to the BDNA Data Platform
- Register your BDNA Analyze License
- Define Website and Management Account
- Configure Memory

Next

Cancel

2. The next screen you see is the Connect to BDNA Data Platform screen. The information you provide in this screen enables the connection between the Data Platform server and the User Console server. Enter connection settings and credentials to retrieve BDNA Data Platform configuration information. The User Console configuration wizard uses the information to set up the BDNA User Console service.

Figure 3-10: Connect to BDNA Data Platform

Connect to BDNA Data Platform

Enter connection settings and credentials to retrieve configuration information from the BDNA Data Platform server. The configuration wizard will use this information to set up the BDNA User Console service.

Data Platform server	
Protocol Type:	<input type="text" value="https"/>
Host:	<input type="text"/> *
Port:	<input type="text" value="443"/>

Credential	
User Name:	<input type="text"/> *
Password:	<input type="password"/> *

Previous

Next

Cancel

3. The next screen you see is the Register License screen. Click Browse to locate the *.nbilic file, and click Register to activate the license.

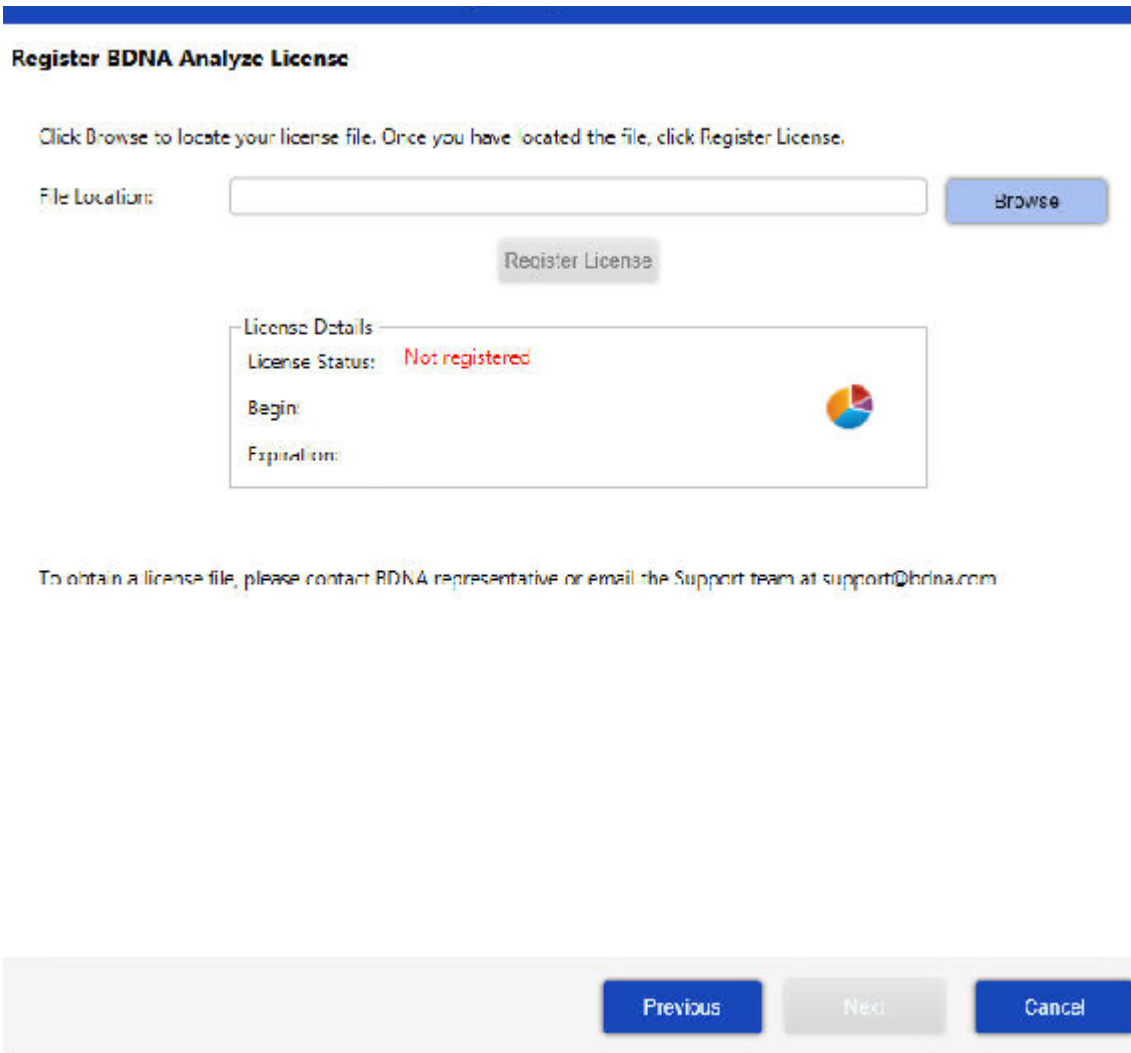
License keys have the following format:

Customername_date_.nbilic

Trial keys have the following format:

Trial_date_.nbilic

Figure 3-11: License Key activation

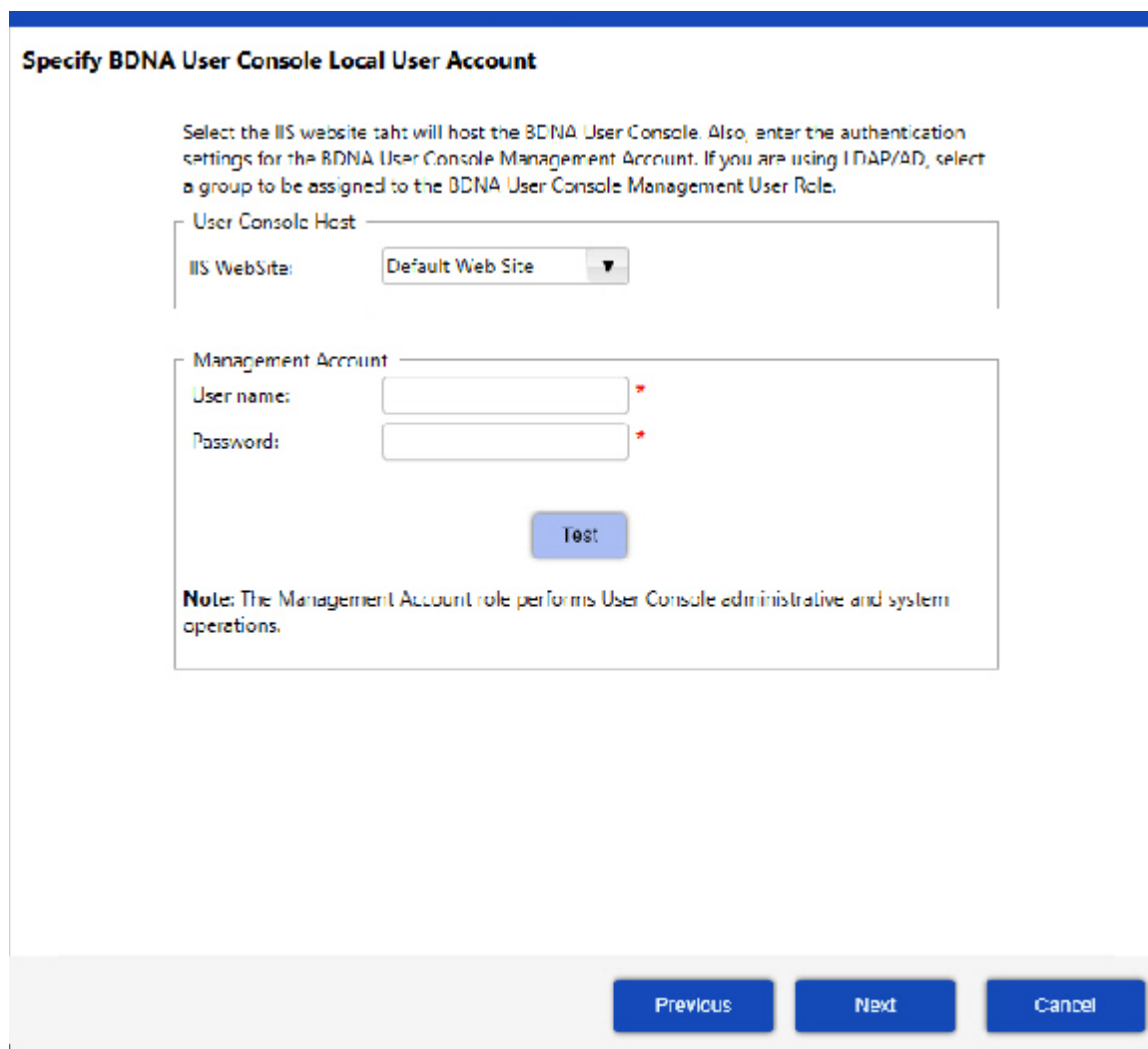


4. The next screen you see is the IIS and Account Management screen. Use this screen to select the IIS website that will host the BDNA User Console. Also, enter the authentication settings for the BDNA User Console Management Account. If you are using LDAP/AD, select a group to be assigned to the BDNA User Console Management User Role.



Note • The Management Account role performs User Console administrative and system operations.

Figure 3-12: IIS and Management Account Settings screen



Specify BDNA User Console Local User Account

Select the IIS website that will host the BDNA User Console. Also, enter the authentication settings for the BDNA User Console Management Account. If you are using LDAP/AD, select a group to be assigned to the BDNA User Console Management User Role.

User Console Host

IIS WebSite:

Management Account

User name:

Password:

Note: The Management Account role performs User Console administrative and system operations.

5. The next screen you see is the Memory Configuration dialog. Use this screen to specify the maximum memory that can be allocated to the BDNA User Console components.



Note • A default value for memory allocation is set during startup. It can increase as necessary to the maximum value you specify in the Memory Configuration dialog box.

Figure 3-13: Memory Configuration dialog

Memory Configuration

Please specify the maximum random-access memory (RAM) that can be allocated to each component.

Note: There are 2443 MB of available memory on this system.

Web Server

Maximum RAM: 3072 MB

Required: 3072 MB

Search

Maximum RAM: 2048 MB

Required: 2048 MB

Available: 2443 MB

Note: An initial size will be allocated on startup and it can grow up to the maximum value specified above. The actual amount of memory that will be allocated will be limited by the available memory on the system.

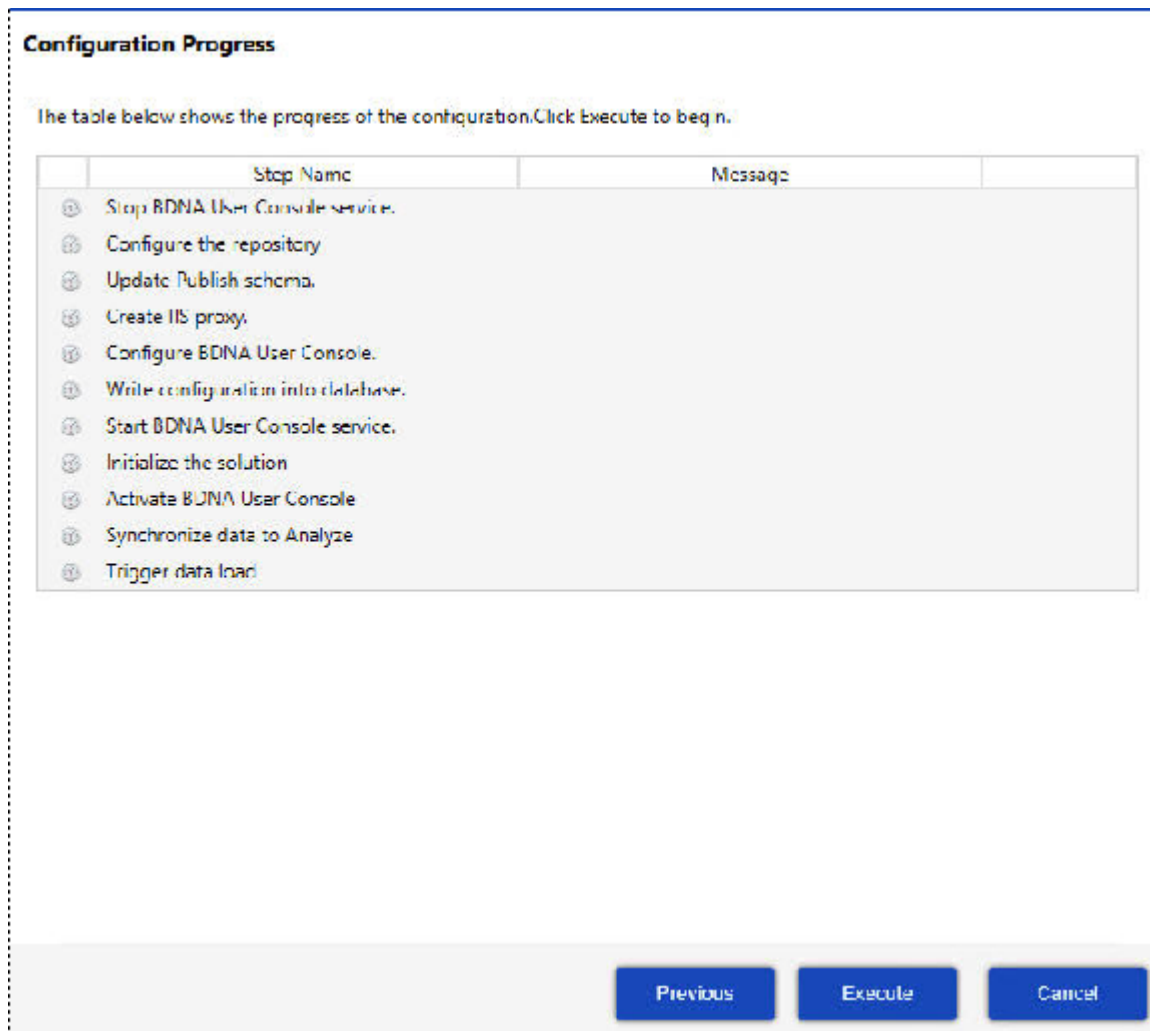
Previous

Next

Cancel

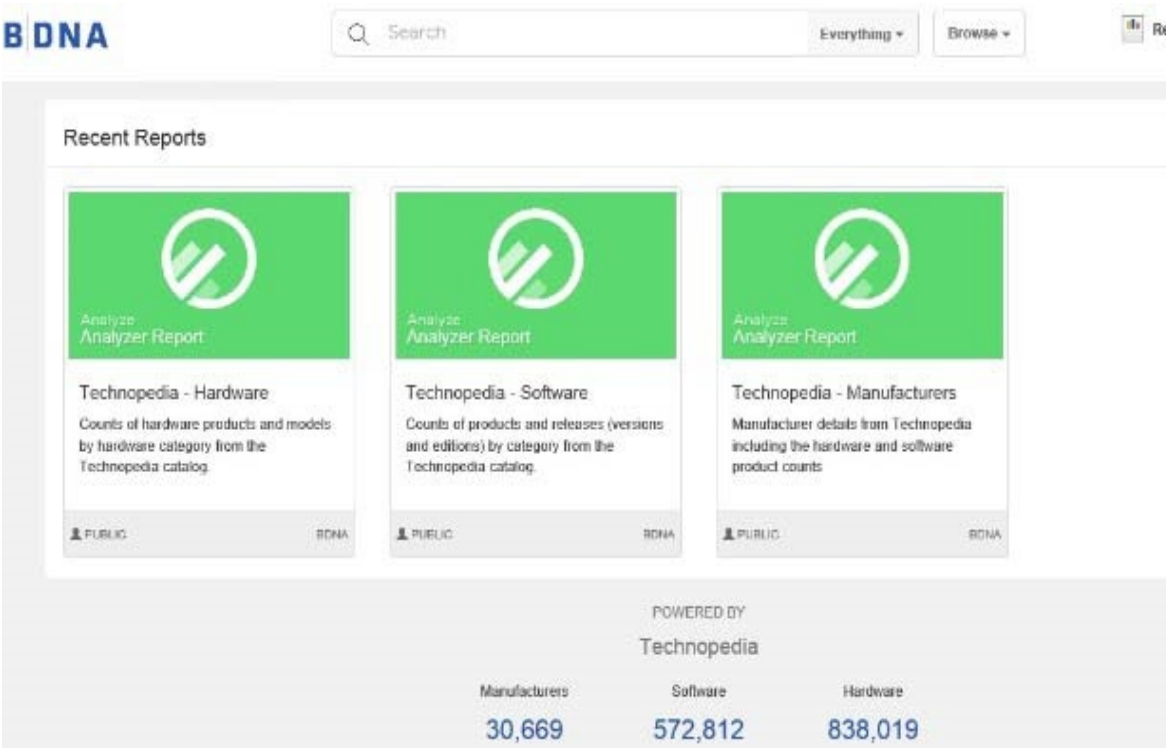
6. The next screen that opens is the Configuration Process dialog. Click Execute to begin the configuration process. Messages appear in the message column that provide status details about each step in the process.

Figure 3-14: Configuration process



7. When the configuration process is finished, a Configuration process successful dialog opens. Click Finish to end the configuration process and launch the BDNA User Console console.
8. The next screen that opens is the BDNA User Console landing page. See the *BDNA User Console 5.5 User Guide* for detailed instructions about BDNA User Console operations.

Figure 3-15: User Console landing page



BDNA Normalize Migration Wizard Process

The BDNA Normalize Migration Wizard Process is intended for customers who want to upgrade the User Console from a previous version (i.e. 5.3x or 5.4x) to the newest version of 5.5.0. The BDNA Migration Tool allows users to migrate existing settings and Private Catalog Data to their new 5.5.0 installation. These setting include Normalize configurations, integration setup, and Analyze custom reports. This migration method is used in lieu of the older patch set upgrade method. This is by design. It provides a clean way to migrate to 5.5.0 without having to go through a lengthy patch set upgrade.



Note • If 5.5.0 is installed on the same server as the old version, be sure to perform the backup before uninstalling the old version.



Caution • Existing Normalize data will not be migrated. It must be removed during 5.5.0 installation. All Data Platform and User Console configuration settings will be preserved.

There are two parts to the BDNA Normalize Migration Wizard: Backup and Restore. These operations allow you to backup settings on your previous version of the User Console and then restore those settings in your latest version of 5.5.0. The Backup Phase must be implemented before installing a fresh version of 5.5.0. The Restore Phase occurs after completing a fresh install of 5.5.0. At a high-level, upgrading your existing version of the User Console to 5.5.0 requires you to backup, install, and restore your settings as follows:

1. Using the BDNA Normalize Migration Wizard, backup your settings on your existing version of the User Console (i.e. 5.3x or 5.4x).
2. Completely install the new 5.5.0 User Console and complete the configuration wizard
3. Using the BDNA Normalize Migration Wizard, restore your previous settings in your newest version of the 5.5.0 User Console.

Migration Wizard Workflow

Backup Phase

The BDNA Normalize Migration Wizard allows customers to backup their settings on their previous version of the User Console (i.e. 5.3x or 5.4x) before upgrading to 5.5.0 via a fresh install. Below is a list of the four types of User Console settings that will be backed up when using the BDNA Normalize Migration Wizard:

- Analyzer Reports
- Interactive Reports
- Dashboard Reports
- Access Control (report sharing)



Note • If your old Normalize version is deployed with a distributed configuration where the Data Platform and User Console are configured on separate systems, you will need to run the backup on each system separately then copy the backup files to the new environment.

When performing the Backup process during the Migration Wizard process, the following file types may contain some sensitive data:

- Data source files (IT sources, PO, and mashup)
- Norm.Configuration.config configuration file

If you wish to migrate the private catalog and private mapping, first create a backup from your 5.3x or 5.4x setup that has private catalog. See the “Restore Phase” process below to see how to restore your private catalog and private mapping after the Backup processes.



Note • Before starting backup, please ensure that there are no running Normalize processes or catalog syncs in progress.

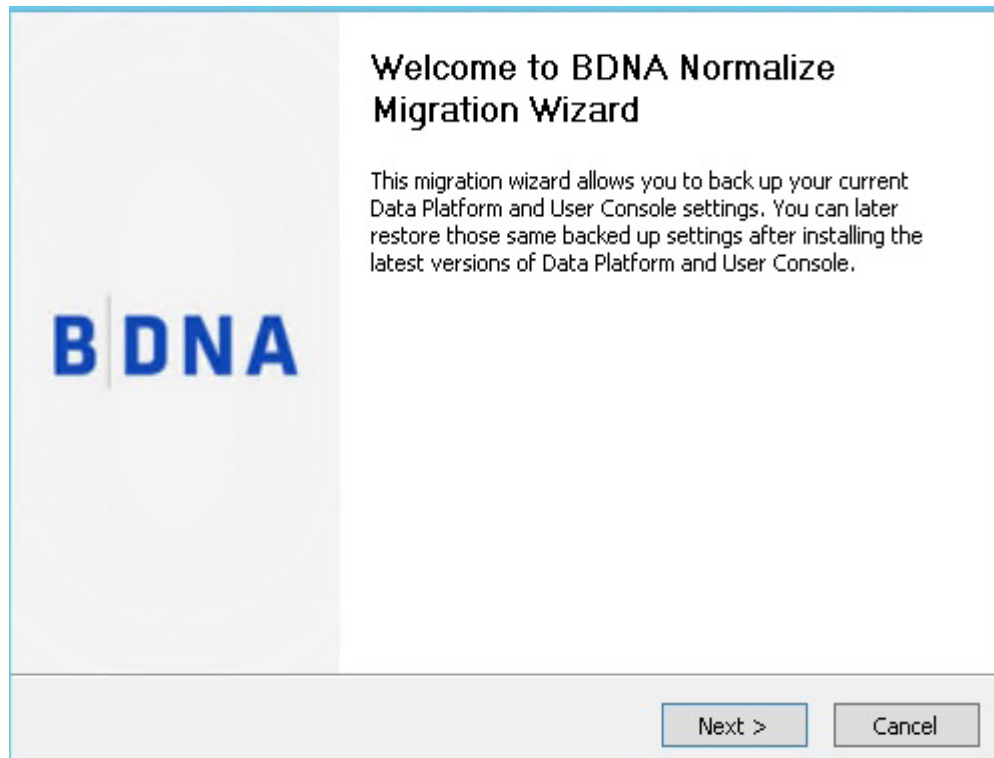
The Migration Wizard must be copied to the local file system on which you wish to perform your backup. If restoring to a different system than the one being backed up, the backup output folder must first be copied to the local file system of the target system on which it will eventually be restored.

To begin the Backup Phase of the installation process, please see the following steps:

1. Double-click the BDNA Normalize Migration Wizard icon on your desktop after downloading it from (<https://flexeracommunity.force.com/customer/CCDownload>).



2. Once the welcome screen appears, click Next.



3. On the BDNA Migration Options screen, select “Backup BDNA settings,” then select the checkboxes for BDNA Data Platform and/or BDNA User Console. Click Next.



Note •

Under the Data Platform and User Console checkboxes, the last version number (i.e 5.3x or 5.4x) must be showing and the status must register as “Running” in order to proceed.

BDNA Migration Options

Select the Backup or Restore options. The component service must be running before it can be selected. At least one component needs to be selected on this page.

☒ **Backup BDNA settings**

☐ **Restore BDNA settings**

Local BDNA Components

<input checked="" type="checkbox"/> BDNA Data Platform
Version: 5.2.0.
Status: Running
<input checked="" type="checkbox"/> BDNA User Console
Version: 5.2.0.
Status: Running

- BDNA Normalize Migration Wizard

< Back Next Cancel

4. On the Database Information page, host, schema, and user information will be displayed. Click Next.

Database Information

The following displays local BDNA server database information.

Database Type: EXISTING_MSSQL

DB Information

DB Host: localhost	
BDNA Schema: BDNA	Publish Schema: BDNA_PUBLISH
BDNA User: BDNA	Publish User: BDNA_PUBLISH

- BDNA Normalize Migration Wizard

< Back Next Cancel

5. On the Ready page, if you are satisfied with your selections, please click Execute.

Ready Option

Ready to execute your selected options...



Your selected options are ready to be backed up. Click "Execute" to proceed.

Backup selected status:

- Data Platform Server: Yes
- User Console Server: Yes

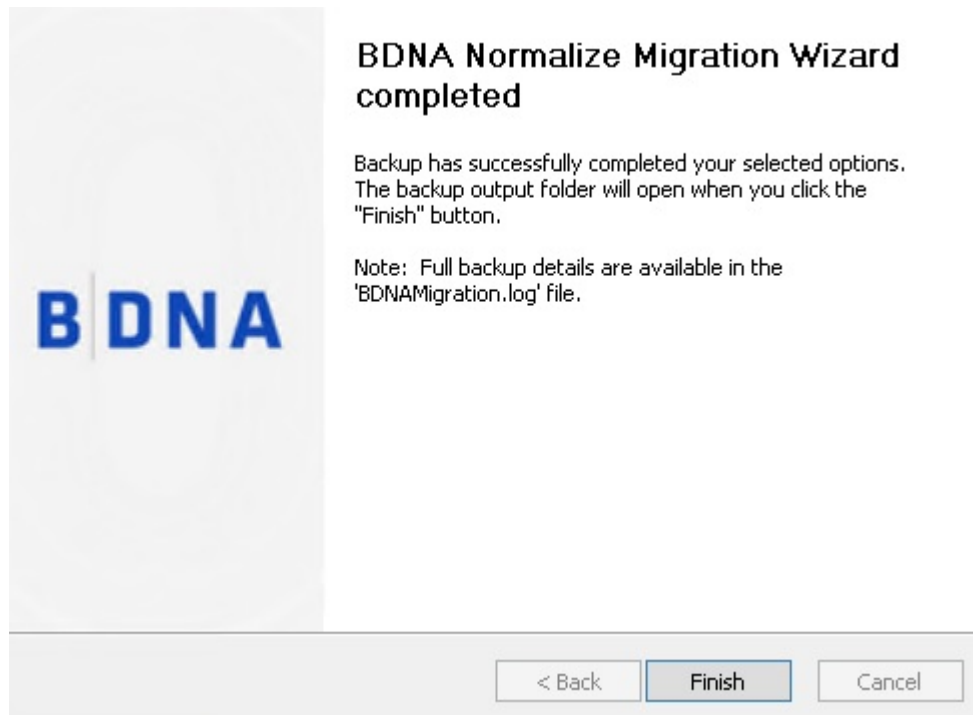
- BDNA Normalize Migration Wizard

< Back

Execute

Cancel

6. Click Finish when done.



7. After clicking the Finish button, the backup output folder will open. Copy the backup output folder to the new environment for the Restore process.

Restore Phase

The requirement for the Restore process is that you must start from a new 5.5.0 installation. This includes but is not limited to:

- No existing Normalize process running.
- No private catalog data created or previously restored.
- No custom reports.



Note • If you have TPC data on a 5.5.0 instance or previously restored private data on 5.5.0, you cannot restore TPC data from another source again.

If you want to restore the security settings and report ACLs, make sure to use the exact same Authentication mode when running a migration from an earlier version (i.e. 5.3.x) to 5.5. Use the same Binding user name and Base DN setting if using LDAP AD (if the user is using AD). After restoring the shared/saved reports and reports ACLs, reports may not show up in User Console until you re-run normalize task. When restoring reports ACL, make sure the Migration Tool restore has been performed on Data Platform first.

For Windows Authentication backup, the restore can only be done on the same server from which the backup was created.

When restoring private catalog, make sure User Console service is up and running. Also make sure to do the following:

- Restore the backup for your private catalog onto the new 5.5.0 system you have installed and wait for the search index to build.
- Run the Technopedia sync (without the sync, private data won't be visible in Technopedia reports).
- Rerun Normalize tasks (required if you have private mapping).

If the catalog is already updated to the latest version at the time of the migration and Technopedia sync does not populate data in Technopedia reports, wait 24 hours and do a sync again in order to see private data in Technopedia reports. A quicker workaround to this known issue is also to use the Normalize command line to force the Analyze ETL as follows:

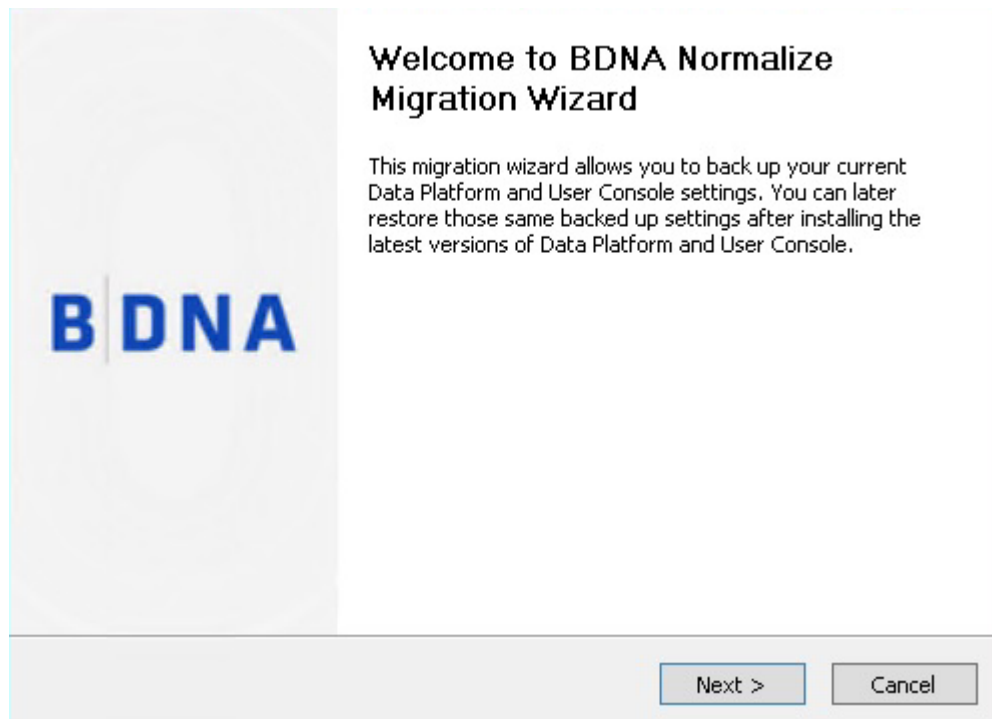
```
<Data_Platform_Install_Directory>\Bin\NormalizeCMD.exe-ETLCATALOG
```

To begin the Restore Phase of the installation process, please see the following steps:

1. Double-click the BDNA Normalize Migration Wizard icon on your desktop.



2. Once the welcome screen appears, click Next



3. On the BDNA Migration Options screen, select “Restore BDNA settings,” then select the checkboxes for BDNA Data Platform and/or BDNA User Console. Click Next.

BDNA Migration Options

Select the Backup or Restore options. The component service must be running before it can be selected. At least one component needs to be selected on this page.

☐ **Backup BDNA settings**

☒ **Restore BDNA settings**

Local BDNA Components

<input checked="" type="checkbox"/> BDNA Data Platform
Version: 5.2.0.
Status: Running
<input checked="" type="checkbox"/> BDNA User Console
Version: 5.2.0.
Status: Running

- BDNA Normalize Migration Wizard -

< Back Next Cancel



Note •

Under the Data Platform and User Console checkboxes, the last version number (i.e. 5.3x or 5.4x) must be showing and the status must register as “Running” in order to proceed.

4. On the Restore BDNA settings page, browse for the Backup Output Folder you copied from the backup process, then select the checkboxes of the setting types you eventually want restored. Click Next.

Restore BDNA settings

Prepare to restore your desired BDNA settings.



Please select the directory that holds your backup files.

BDNA Data Platform Server:

☐ Normalization process settings

☐ Synchronize settings

☐ Security settings

☐ Private catalog settings

BDNA User Console Server:

☐ Custom reports

☐ Report ACL

- BDNA Normalize Migration Wizard -

5. On the “Ready Option” page, select ‘Execute when ready.’

Summary

Ready to execute your selected options...



Restore selected status:

Data Platform Server:

- Normalization process settings: Yes
- Synchronize settings: Yes
- Security settings: Yes
- Private catalog settings: No

User Console Server:

- Custom reports: No
- Report ACL: No

Note: Restore will replace all existing settings listed above with settings from the backup. Click "Execute" to proceed.

- BDNA Normalize Migration Wizard -



Offline Installation of Prerequisites

For most installations, the BDNA User Console installer will download all necessary prerequisite software from the Internet. To accomplish this, the installer must have Internet access. If Internet access is not available, the installation process will abort.

If you do not have Internet access, you can download the necessary prerequisite software on a different system, and then copy it onto the Normalize server. This appendix lists all necessary prerequisite software and their offline locations.

MS SQL Server

Microsoft System CLR Types for SQL Server 2014

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_SQL2014_SQLSysClrTypes_x64_ENU.msi

Microsoft System CLR Types for SQL Server 2016

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_SQL2016_SQLSysClrTypes_x64_ENU.msi

Microsoft SQL Server 2014 Shared Management Objects

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_SQL2014_SharedManagementObjects_x64_ENU.msi

Microsoft SQL Server 2012 Native Client

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_SQL2014_sqlncli_x64_ENU.msi

Microsoft SQL Server 2016 Shared Management Objects

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_SQL2014_SharedManagementObjects_x64_ENU.msi

Microsoft SQL Server 2012 Native Client

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_SQL2014_sqlncli_x64_ENU.msi Microsoft SQL Server

2016 Native Client

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_SQL2016_sqlncli_x64_ENU.msi

Oracle

64-bit ODAC 12c Release 3 (12.1.0.2.1) Xcopy for Windows x64

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_ODAC121021Xcopy_x64.zip

ODP.NET, Managed Driver xcopy

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_ODP.NET_Managed121020.zip

Instant Client Package - SQL*Plus x64

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_instantclient-sqlplus-windows.x64-12.1.0.2.0.zip

If existing Oracle database is selected

https://tus50.bdna.com/DownloadComponent.aspx?CName=URL_vc2010redist_x64.exe

URL Scanner with IIS

BDNA strongly recommends that customers do not deploy a URL scanner on a system where the User Console or Data Platform will be configured. Failure to observe this precaution may result in incompatibility issues with verbs (such as DELETE or PUT), sequences (such as colons and percentages), URL paths, and content lengths.



Known Issues

Known issues in the BDNA User Console.

This appendix provides information about known issues in the BDNA User Console. The information contained in this appendix provides a description of the behavior, and an explanation, solution, or workaround for the behavior.

BDNA User Console Shows Null Data When Using Trial License

If you are using a trial license, the BDNA User Console will only display data after you run a Normalize process. Prior to running a Normalize process all statistical numbers on the User Console landing page will show null values. Also, if you browse any Manufacturers or Categories on the User Console prior to running a Normalize process, the system will display a “No Results” message.

Separate Accounts Required When Using SQL Authentication

If you are using SQL authentication to connect to a database, you must set up separate SQL accounts for BDNA User Console and BDNA Normalize. Additionally, the SQL accounts you set up for BDNA Normalize and BDNA User Console cannot be used by any other applications.

Import of Valid SSL Certificate Displays Error Message

When re-running the BDNA User Console configuration wizard, you may encounter an error message which indicates that the new certificate you are importing is invalid. To prevent this error condition, you must first delete the existing certificate(s) from the following directory:

```
%APPDATA%\mono\certs\Trust\
```

BDNA User Console Configuration Wizard Hangs on Last Step

If your IT policy requires that IIS “Default Website” be disabled, the BDNA User Console Configuration Wizard will hang on the last step, “Start BDNA User Console Service.” This occurs because the Configuration Wizard is hard-coded to create an ISAPI filter on the “Default Website.”

You can resolve this problem using the following manual procedure:

1. If the BDNA User Console Configuration Wizard hangs on the last step of the Configuration Process, and you confirm that the environment has “Default Website” disabled, cancel the Configuration Wizard by clicking the **Cancel** button.
2. Open the Services panel to locate and stop the “BDNA User Console” service.
3. Open the “Internet Information Services (IIS) Manager.” Click the server name and navigate to ISAPI Filters in the IIS panel.
4. Click ISAPI Filters to add an ISAPI Filter for the active website using the following specifications:

Name: BDNA User Console

Path: C:\Program Files\BDNA\BDNA User Console\Tools\TomcatConnector\lib\isapi_redirect.dll
5. Right-click on the active website and select Add Application to open the Add Application dialog. Enter the following specifications:

Name: BDNAAnalyze

Path: C:\Program Files\BDNA\BDNA User Console\Tools\TomcatConnector\lib

6. In the IIS panel, click Handler Mappings for the active website. Open the Add Script Map dialog and enter the following specifications:

Request path: *.jsp
Executable: C:\Program Files\BDNA\BDNA User Console\Tools\TomcatConnector\lib\isapi_redirect.dll
Name: AnalyzeHandler

Click **OK**.
7. Click Edit Feature Permissions to open the Edit Feature Permissions dialog.
8. Place a check in the Execute checkbox. Click **OK**
9. Verify the following settings:

Server level ISAPI and CGI Restrictions has BDNA User Console Allowed.

Expanded HKLM\SW\Apache Software contains the added items.
10. Restart the “BDNA User Console” service.
11. Open the BDNA User Console Console and login.



Note • If you re-run the Configuration Wizard, it will hang at the last step again. However, the manual configuration described above may still be in place. Follow the steps above to confirm that the configuration has been retained.

BDNA User Console in IE Requires Windows Authentication Mode

This occurs when Internet Explorer is using “Internet settings enabled.” To eliminate the requirement for authentication, change Internet Explorer setting to “intranet settings enabled.”

Unable to Load Home Page in Chrome When Selecting Windows Authentication

Caused by a combination of proxy settings configured in IE and how Chrome handles proxy settings.

To fix this issue, do the following:

1. When using proxy server, enable the option “Bypass proxy server or local addresses.”
2. Re-install Chrome to force Chrome to retrieve the proxy settings correctly.

5.5.0 Normalize Mapping Cube

The 5.5.0 Normalize Mapping cube, Unmatched Package report, and Unmatched Files report are disabled by default. This is due to the MatchAddremove and MatchExe configuration settings being disabled in order to improve performance. Please see below if you want to re-enable them.

To enable these, you need to change the following parameters and make them true in Normalize.configuration.config:

```
<MatchAddremove>true</MatchAddremove> <MatchExe>true</MatchExe>
```

After you change the parameters, you need to rerun the Normalize tasks and then you should see the Normalize Mapping cube with both the Unmatched Package and Unmatched Files report showing up.

Appendix B **Known Issues**

Known issues in the BDNA User Console.



Additional Information and Configuration

This appendix provides additional information about BDNA User Console 5.5 including information about how to modify configuration file settings.

Modifying the “Analyze Console Unavailable” Banner

You can modify the text and the appearance of the Analyze unavailable banner by editing the following file:

```
<install location>:  
\\Program Files\\BDNA\\User Console\\Tools\\Tomcat\\webapps\\bdna\\bdna-maintenance.jsp
```

Configuring Pre-cached Reports

This functionality allows you to specify, in the <CacheReports> section of the NBI.Configuration.config file, a list of reports you want to pre-cache for faster access. For example, you might want to pre-cache reports you have created instead of the pre-defined reports provided by BDNA on the Analyze landing page. In this case, you would comment out the pre-defined reports and add your own reports to the list.

Example:

```
<CacheReports>  
  <ReportFilename><![CDATA[%NORMALIZE_BI_HOME%\NBI\NBIITDiscovery\Analysis\Hardware\Top</  
CacheReports>
```

There are three additional configuration properties for <CacheReports>:

```
<Active><![CDATA[True]]></Active>  
<Frequency><![CDATA[3600]]></Frequency>  
<LogLevel><![CDATA[INFO]]></LogLevel>
```

Options:

<Active> = True/False: indicates if pre-caching of reports is active or inactive.
<Frequency> = Time in seconds (default is 3600 seconds, which is 1 hour).

<Loglevel> = INFO (default): will log start and finish. DEBUG will log overall Start and Finish as well as process time for each pre-cached report.<Loglevel> = INFO (default): will log start and finish. DEBUG will log overall Start and Finish as well as process time for each pre-cached report.

Using IIS over SSL Requires Modification to NBI.configuration.config

Web Server Certificate

A Web server certificate should be ready to be imported to the IIS Server. The Subject CN of the certificate should be matched with the host name.

IIS Settings

In IIS Manager, the web site where User Console is hosted should be configured properly before configuration wizard.

- Binding of HTTPS/port 443 should be added with Web Server certificate.
- Binding of HTTP/port 80 should be removed.Disable Full Technopedia Catalog Load to BDNA User Console



Note • Make sure to re-run the Data Platform Configuration Wizard before configuring the User Console Wizard.

Configuration of User Console Configuration Wizard

The configuration wizard automatically picks up the settings of IIS web site and (re)create /BDNAUserConsole app node.

- Go through the configuration wizard and complete it.
- The configuration wizard takes care all the settings from IIS server.
- Open NBI.configuration.config file, search for Account4Security or search for the port number (such as # 443), ensure the value contains.
 - HTTPS as protocol.
 - FQDN as hostname.
 - 443 as port number.Enabling Security Notification Banner

Browser

Always use FQDN as host name in URL to access to User Console.

Known Issue

Bindings of HTTP/80 and HTTPS/443 at the same time in the IIS website can result in unexpected behavior, such as User Console activation failure, connection between Data Platform, and User Console failure.



Note • Users should not manually update the nodes for `<IISWebSite>` and `<IISAliasName>`

Enabling Security Notification Banner

A Security Banner provided with the BDNA User Console Console is disabled by default. To enable it, make a simple edit to the BDNA User Console web.xml file.

To enable the security banner:

1. Open the following file in a text editor:

```
<install location>:
\Program Files\BDNA\User Console\Tools\Tomcat\webapps\bdna\WEB-INF\web.xml
Find the <param-name> "filter-enabled".
```

2. In the line that contains `<param-value>`, change "false" to "true".

For example, change:

```
<init-param>
<param-name>filter-enabled</param-name>
<param-value>>false</param-value>
</init-param>
to
<init-param>
<param-name>filter-enabled</param-name>
<param-value>>true</param-value>
</init-param>
```

Customizing the Security Banner

You can customize the Security Banner so that it contains site-specific text.

To customize the Security Banner:

1. Open the following file in a text editor:

```
<install location>:
\Program Files\BDNA\User
Console\Tools\Tomcat\webapps\bdna\license-accept.jsp
Find the "<div class="content">" ... "</div>" text block.
```

2. Edit the banner content in the text block.



Note • You need to restart the BDNA User Console service for these changes to take effect.

Timeout Setting for Screen Sessions on BDNA User Console

The BDNA User Console console is preconfigured with a screen session timeout set for 120 minutes.

You can configure a different timeout setting by modifying the “session-timeout” value (in minutes) in the web.xml file found at the following location:

```
<NORMALIZE_BI_HOME>\Tools\server\biserver-ee\tomcat\webapps\NormalizeBI\WEB-INF\web.xml
```



Note • You must restart the BDNA User Console service for these changes to take effect.



Task

To change the default session timeout value from 120 minutes to 200 minutes:

1. Stop the BDNA BDNA User Console Service.
2. Change:

```
<session-config>
  <session-timeout>120</session-timeout>
</session-config>
```

to

```
<session-config>
  <session-timeout>200</session-timeout>
</session-config>
```

3. Remove the files from the following two paths:

```
<install location>:
\Program Files\BDNA\User Console\Tools\Tomcat\webapps\temp\*
<install location>:
\Program Files\BDNA\User Console\Tools\Tomcat\webapps\work\*
```

4. Start the BDNA User Console Service.



Note • The session timeout setting works in LDAP mode. It does not work in Windows Authentication mode.

Supported Mashup Types in BDNA User Console 5.5

Manufacturer mash-up functionality is currently unavailable in BDNA User Console. The supported mash-up sub-types are:

- CPU
- HARDWARE
- MACHINE
- OS
- SOFTWARE
- USER

