



DEXcenter

Version 13 Administration and Configuration Guide



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Section 1. Introduction

Chapter 1. Who should read this manual?

This manual is for the persons responsible for DEXcenter administration and configuration. This manual discusses the typical operations to monitor and manage daily use as well as configuration after the initial installation.

- Managing Companies, Users, and Groups
- Monitoring, Accessing, Checking user sessions
- Creating Reports
- Monitoring DEXcenter operation functions
- Managing File access repositories.

Primary usage of DEXcenter is covered in the User's Guide with handy commands identified in the User's Quick Reference Guide.

The Deployment Guide provides instructions for initial installation and configuration. Requirements for configuration after the initial installation are covered in this guide.

Most administrator functions can be performed using the DEXcenter web interface when logged in as a user with DEXcenter administrator privileges.

The administrator functions are accessed from the "Administration" menu.

Administration functions involve managing members, companies, sessions, groups, generating reports, and performing basic diagnostic checks.

Most DEXcenter configuration is performed outside of the DEXcenter GUI by modifying the database and pertinent control files. The Configuration menu provides access to a limited set of configuration information and functionality for users which have ROLE_CONFIG authority.

Additionally, there is a 'Help' menu which provides documentation and support information.

DEXcenter
Admin Console

DEXcenter Administrator English

- Administration
- Report
- Configuration
- Help

<< You have selected the Administration category. Select a sub category to go to the corresponding page.

DEXcenter
Admin Console

DEXcenter Administrator English

- Administration
 - All Sessions
 - Companies
 - Messaging
 - User Activation
 - User Groups
 - User Management
 - Logging
 - Diagnostic
- Report
- Configuration
- Help

<< You have selected the Administration category. Select a sub category to go to the corresponding page.

Chapter 2. DEXcenter Concepts

DEXcenter is a server application which manages the scheduling and execution of other applications, especially CAD related applications. DEXcenter consists of a primary web server control application and many satellite translation servers which perform the requested application operations.

The following terms will be used throughout this manual:

| | |
|---------|---|
| DXS | DEXcenter Server. The DXS is the main control server for DEXcenter. Users, profiles, translations, and jobs are all managed by the DXS. The DXS can be a single server or part of a clustered environment. |
| DTS | DEXcenter Translation Server. There may be many DEXcenter Translation Servers. Each computer providing translation functions is a DTS. DTS systems can be clustered or non-clustered. |
| DDS | DEXcenter Data Store. DEXcenter can be configured to store data locally on the DXS or via FTP or SFTP on another system. |
| DDB | The DEXcenter database is used to store and manage configuration as well as user information. DEXcenter can use MySQL, Oracle, or SQLServer as the database. |
| Session | Each exchange of data is termed a Session. Users Create Sessions to send data to another user. Recipients receive data by accessing a Session. |
| Users | Each person using DEXcenter must be registered in DEXcenter. Each User has a unique id and password, a Profile of exchange preferences, and their own unique Session area. |
| Roles | Each user is assigned a Role which controls access to DEXcenter functions. ROLE_USER allows access to the DEXcenter user function. ROLE_ADMIN allows access to the DEXcenter AdminConsole. ROLE_CONFIG allows access to the Configuration menu within the AdminConsole. |
| Groups | Groups are Groups of Users. Groups serve several roles: to provide a convenient means to find and manage related members, to provide access to repositories, and to configure approval authority. |
| Profile | Each User has a profile which identifies the requirements and preferences for that User. This includes the desired CAD system and File Format and transmission method for receiving data as well as additional processing options. |

| | |
|--------------------|---|
| Application server | The DEXcenter application works in conjunction with an application server. DEXcenter uses the JBOSS Application Server |
| Authentication | Each User must log into DEXcenter with a unique user name and password. The method of authentication varies depending upon the infrastructure. DEXcenter provides a basic authentication function. The JBOSS application server can be configured to support LDAP or SSO. |
| SSO | Single Sign On. A common method of authentication. Often used when DEXcenter is associated with a corporate portal. By signing onto the corporate portal, users can gain access to DEXcenter without a separate login process. |
| SSL | Secure Sockets Layer. An industry standard encryption method. |
| Job | A Session which has been submitted becomes a Job. The job is put into a Queue and awaits execution based upon the queue rules. |
| Workflow | All processing in DEXcenter occurs based upon a workflow managed by the CAMUNDA workflow engine. |
| Path Workflow | An overall workflow which manages the processing associated with DEXcenter Action types. For instance, for a translation, a path workflow would manage all tasks associated with translating from one CAD system to another. |
| Task Workflow | A Task is an element of a path. For example, the Catia V5 to STEP task creates a step formatted file from a native Catia V5 file. |
| Flavor | Flavors control the execution of Tasks within a Path. For instance, to have a STEP translator generate a STEP AP203 or AP214 format. |

Section 2. Administration Functions

Chapter 1. All Sessions

The All Sessions page under DEXcenter Administration functions allows an Administrator to list, view, and delete any session in the DEXcenter. As in the User application, the Sessions page is paginated. Any column can be sorted by clicking on it. Sessions can be filtered based upon any displayed data item.

| | SESSION ID | SESSION TITLE | RECIPIENT COMPANIES | SENDER | CREATED ON | STATUS | TYPE |
|--------------------------|------------|--|---------------------|--------|-----------------------|-----------|---------------|
| <input type="checkbox"/> | 1123632712 | Session [14-June-2018 12:01:20-0400] | ITI | | 06/14/18 12:03:19 EDT | Completed | Transmit Only |
| <input type="checkbox"/> | 1110637233 | Copy of Session [11-June-2018 14:32:05-0400] | ITI | | 06/13/18 14:23:24 EDT | Completed | Transmit Only |
| <input type="checkbox"/> | 1081944712 | Session [11-June-2018 14:32:05-0400] | ITI | | 06/11/18 14:34:25 EDT | Completed | Transmit Only |

There is an icon bar of 4 icons for available Actions to perform on the listed sections.

Hold the mouse pointer over the icons to see a brief description of each.

The icon Actions are as follows:

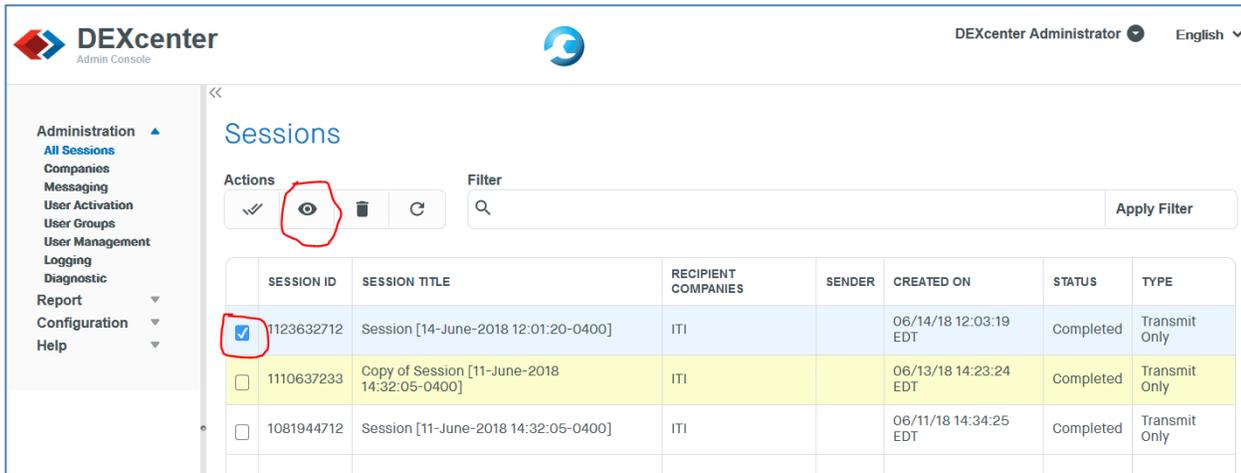
- Select / unselect all sessions (checkmarks - left most icon)
- View session(s) – (eye – 2nd icon from left)
- Delete (s) – (trashcan – 3rd icon from left)
- Refresh Sessions – (circular arrow rightmost icon)

Except for the Refresh icon, the procedure is to select a session or sessions by clicking on the box to the left of the Session ID and then click one of the icons. The selected action will be performed on all the selected sessions.

The Refresh icon refreshes the Sessions page. It does not utilize selected sessions only.

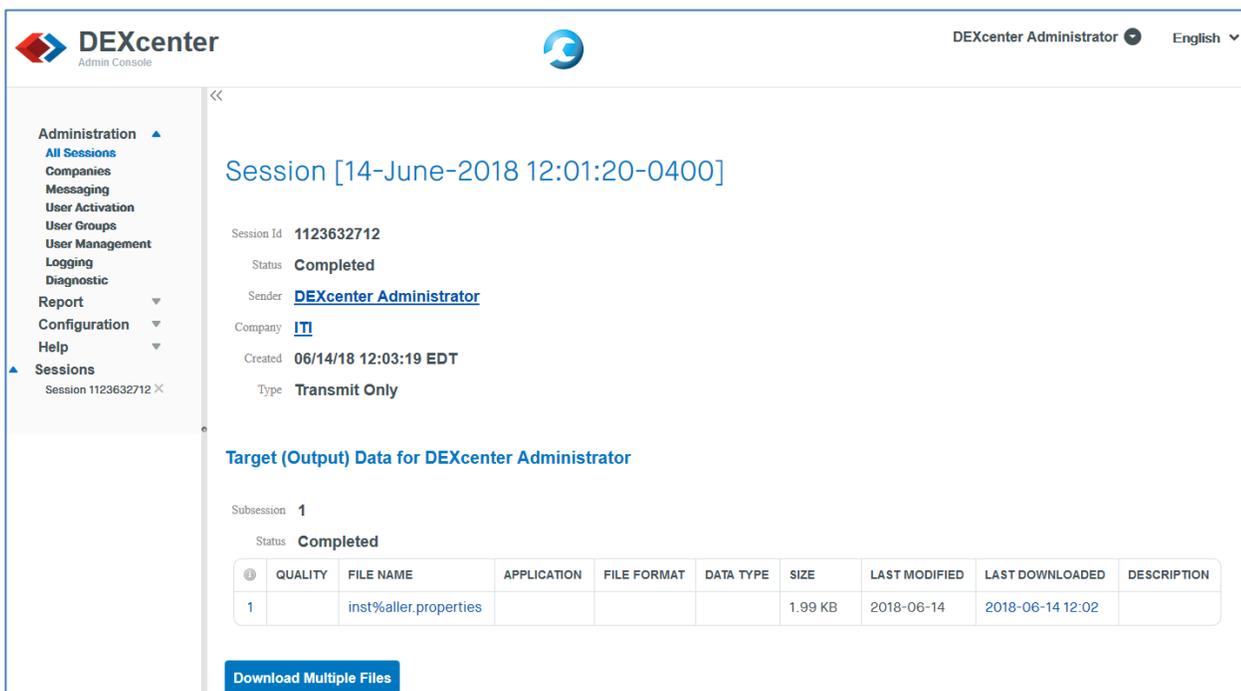
View Sessions

To view one or more sessions, click the box to the left of the session ID and then click the View icon (“eye” - 2nd from left). The session or sessions will open in individual tabs for viewing. Sessions are organized as they are in the User application except that the Admin automatically sees all data regardless of sender and recipient profile settings.



The screenshot shows the DEXcenter Admin Console interface. The left sidebar contains a navigation menu with categories like Administration, All Sessions, Companies, Messaging, User Activation, User Groups, User Management, Logging, Diagnostic, Report, Configuration, and Help. The main content area is titled 'Sessions' and features an 'Actions' bar with icons for checkmark, view (eye), delete, and refresh. A search filter is also present. Below the actions is a table of sessions:

| | SESSION ID | SESSION TITLE | RECIPIENT COMPANIES | SENDER | CREATED ON | STATUS | TYPE |
|-------------------------------------|------------|--|---------------------|--------|-----------------------|-----------|---------------|
| <input checked="" type="checkbox"/> | 1123632712 | Session [14-June-2018 12:01:20-0400] | ITI | | 06/14/18 12:03:19 EDT | Completed | Transmit Only |
| <input type="checkbox"/> | 1110637233 | Copy of Session [11-June-2018 14:32:05-0400] | ITI | | 06/13/18 14:23:24 EDT | Completed | Transmit Only |
| <input type="checkbox"/> | 1081944712 | Session [11-June-2018 14:32:05-0400] | ITI | | 06/11/18 14:34:25 EDT | Completed | Transmit Only |



The screenshot shows the detailed view of a session. The session title is 'Session [14-June-2018 12:01:20-0400]'. The session details are as follows:

- Session Id: 1123632712
- Status: Completed
- Sender: DEXcenter Administrator
- Company: ITI
- Created: 06/14/18 12:03:19 EDT
- Type: Transmit Only

Below the details is a section titled 'Target (Output) Data for DEXcenter Administrator'. It shows 'Subsession 1' with a status of 'Completed'. A table lists the target data:

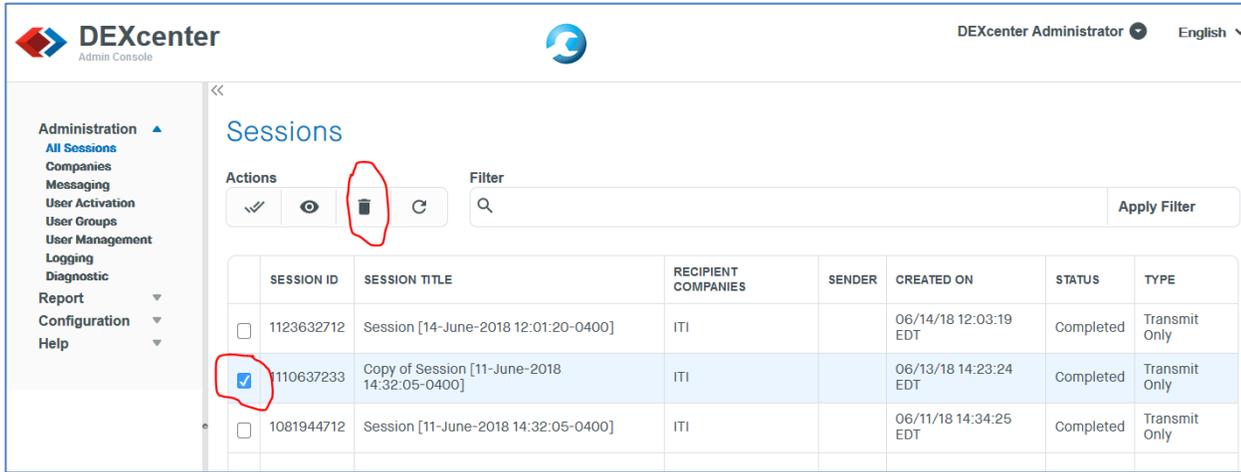
| | QUALITY | FILE NAME | APPLICATION | FILE FORMAT | DATA TYPE | SIZE | LAST MODIFIED | LAST DOWNLOADED | DESCRIPTION |
|---|---------|-----------------------|-------------|-------------|-----------|---------|---------------|------------------|-------------|
| 1 | | inst%aller.properties | | | | 1.99 KB | 2018-06-14 | 2018-06-14 12:02 | |

A 'Download Multiple Files' button is located at the bottom of the target data section.

The sessions opened will appear under “Sessions” in the menu bar to the left. Close the session by clicking on the “X” to the right of the session number in the menu bar.

Delete Sessions

Delete a Session by checking the box to the left of the Session Title, then click the Delete icon (“Trashcan” – 3rd icon from left).

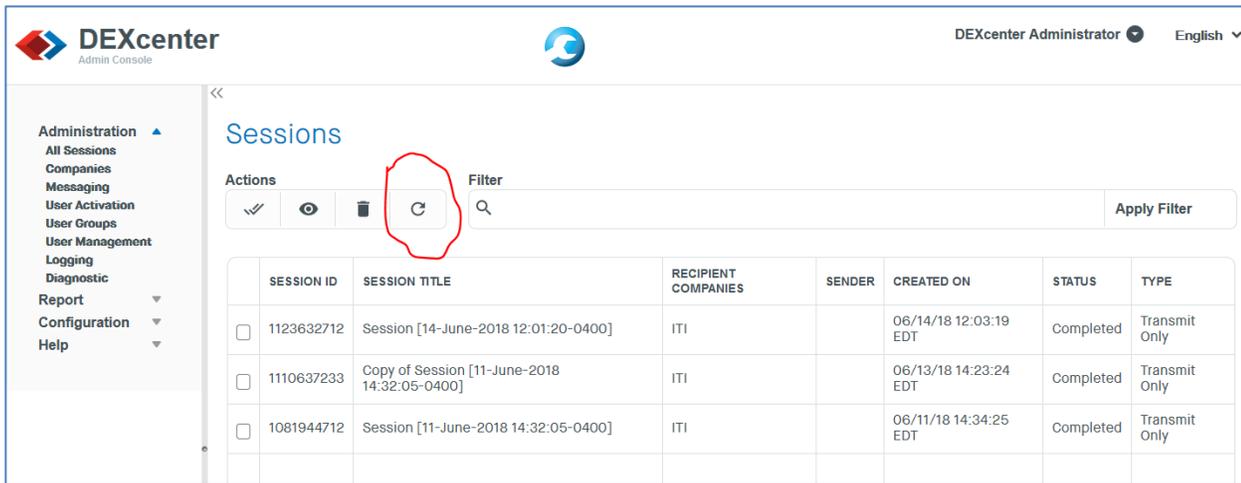


The screenshot shows the DEXcenter Admin Console interface. On the left is a navigation menu with categories like Administration, Reporting, and Configuration. The main area displays the 'Sessions' page. At the top, there are 'Actions' and 'Filter' sections. The 'Actions' section contains four icons: a checkmark, an eye, a trashcan, and a refresh icon. The trashcan icon is circled in red. Below this is a table with columns: SESSION ID, SESSION TITLE, RECIPIENT COMPANIES, SENDER, CREATED ON, STATUS, and TYPE. The table contains three rows of session data. The second row, with SESSION ID 1110637233, has its checkbox selected and is circled in red.

| | SESSION ID | SESSION TITLE | RECIPIENT COMPANIES | SENDER | CREATED ON | STATUS | TYPE |
|-------------------------------------|------------|--|---------------------|--------|-----------------------|-----------|---------------|
| <input type="checkbox"/> | 1123632712 | Session [14-June-2018 12:01:20-0400] | ITI | | 06/14/18 12:03:19 EDT | Completed | Transmit Only |
| <input checked="" type="checkbox"/> | 1110637233 | Copy of Session [11-June-2018 14:32:05-0400] | ITI | | 06/13/18 14:23:24 EDT | Completed | Transmit Only |
| <input type="checkbox"/> | 1081944712 | Session [11-June-2018 14:32:05-0400] | ITI | | 06/11/18 14:34:25 EDT | Completed | Transmit Only |

Refresh Sessions

Click on the refresh icon (rightmost icon) to refresh the list of sessions shown.

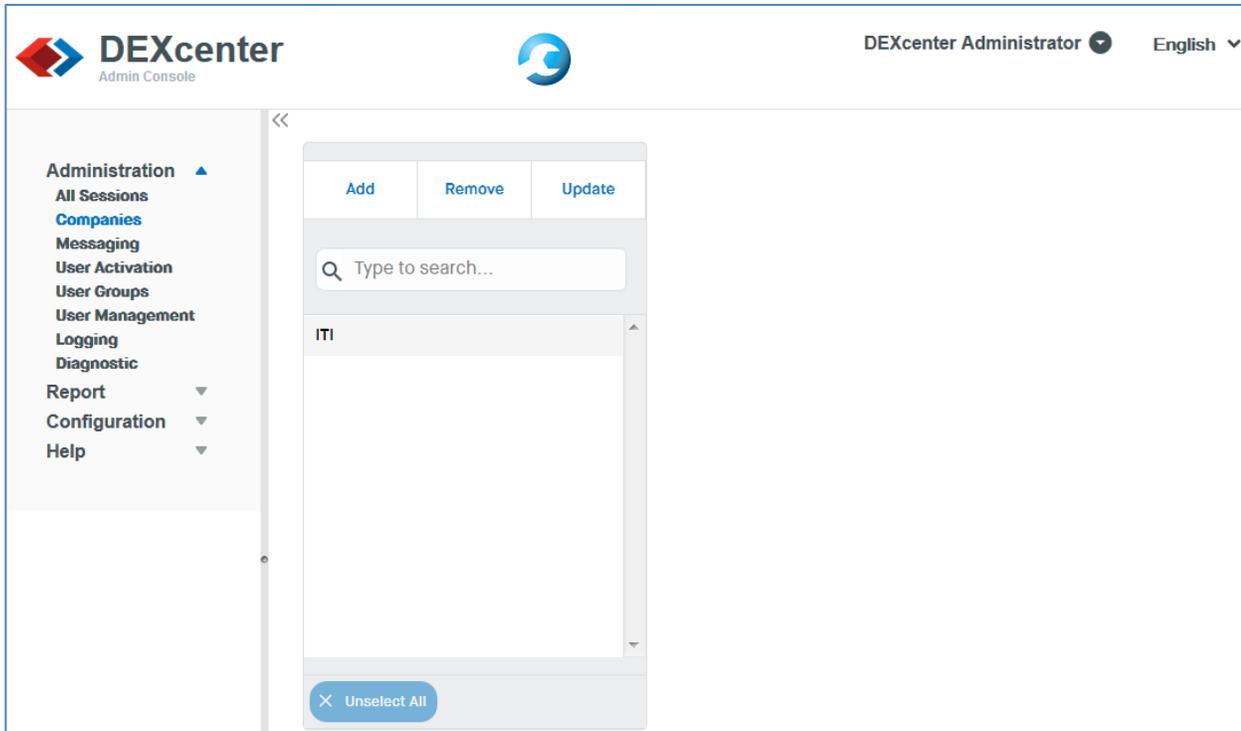


This screenshot is identical to the one above, but the refresh icon (a circular arrow) in the 'Actions' section is circled in red instead of the trashcan icon.

Chapter 2. Companies

The Companies menu manages company information. Users are associated with a company. Since many users may be associated with the same company, it is convenient to capture company information once and then reference it as appropriate. The Companies form also allows unique Company data to be included.

When “Companies” is selected, a list of defined Companies is displayed.



To add a new company, select “Add”, complete the form displayed, and select “Save”.

The screenshot displays the DEXcenter Admin Console interface. At the top, the logo and 'Admin Console' text are on the left, and 'DEXcenter Administrator' and 'English' are on the right. A sidebar on the left contains a navigation menu with categories like Administration, All Sessions, Companies, Messaging, User Activation, User Groups, User Management, Logging, Diagnostic, Report, Configuration, and Help. The main content area is divided into two sections. On the left, there's a table with a search bar and buttons for 'Add', 'Remove', and 'Save'. The table has one entry 'ITI' which is selected. Below the table is an 'Unselect All' button. On the right, the 'COMPANY INFORMATION' form is shown. It contains several input fields: 'Company Name' (OEM), 'Duns Number', 'Company ID', 'Address 1' (1300 Elm Street), 'Address 2', 'City' (Chicago), 'State, Zip Code' (IL 60606), and 'Country' (UNITED STATES). There are also three toggle switches: 'Generate ID?' (checked), 'Export Authorization Required', and 'PIA Agreement'. Red circles are placed to the right of the 'Company Name' and 'Country' fields to indicate they are required.

The red circles to the right of the fields on the form (OEM, Country) indicate these are required entries and cannot be left blank.

You can choose to enter a Company ID or let DEXcenter automatically generate one.

Select “Save” from the buttons above the Company list to save the new Company profile.

To Edit the Company information, select the Company name, modify as appropriate and then “Save”

The Export Authorization Required allows notifications and tracking of data to ensure compliance with government export regulations. If checked, then data sent to Users of this Company will require Export Authorization (ITAR/EAR, etc.) information to be provided.

A Proprietary Information Agreement (PIA) can be specified associated with the company to ensure that an intellectual property data sharing agreement exists before any data can be released. Click the PIA Agreement slider and then complete the form boxes which appear. The Effective and Expiration date fields are required. Click in the date box to select a date from a pop up calendar. When a session is submitted the current date is compared to the date range in the PIA agreement. If the current date is not within the allowable range, the session cannot be submitted and a message appears on the Create Session form.



- Administration
- All Sessions
- Companies
- Messaging
- User Activation
- User Groups
- User Management
- Logging
- Diagnostic
- Report
- Configuration
- Help

Add Remove Update

Type to search...

ITI

OEM

Unselect All

COMPANY INFORMATION

Company Name OEM

Duns Number

Company ID 2

Address 1 1300 Elm Street

Address 2

City Chicago

State, Zip Code IL 60606

Country UNITED STATES

Export Authorization Required

PIA Agreement

Agreement Number ITI1010101

Holding Authority ITI

Comment Proprietary Information Agreement between ITI and OEM company.

Effective Date 2018-07-01

Expiration Date 2018-08-03

Legend AUG 2018
S M T W T F S
23 30 31 1 2 3 4
5 6 7 8 9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30 31 1
2 3 4 5 6 7 8

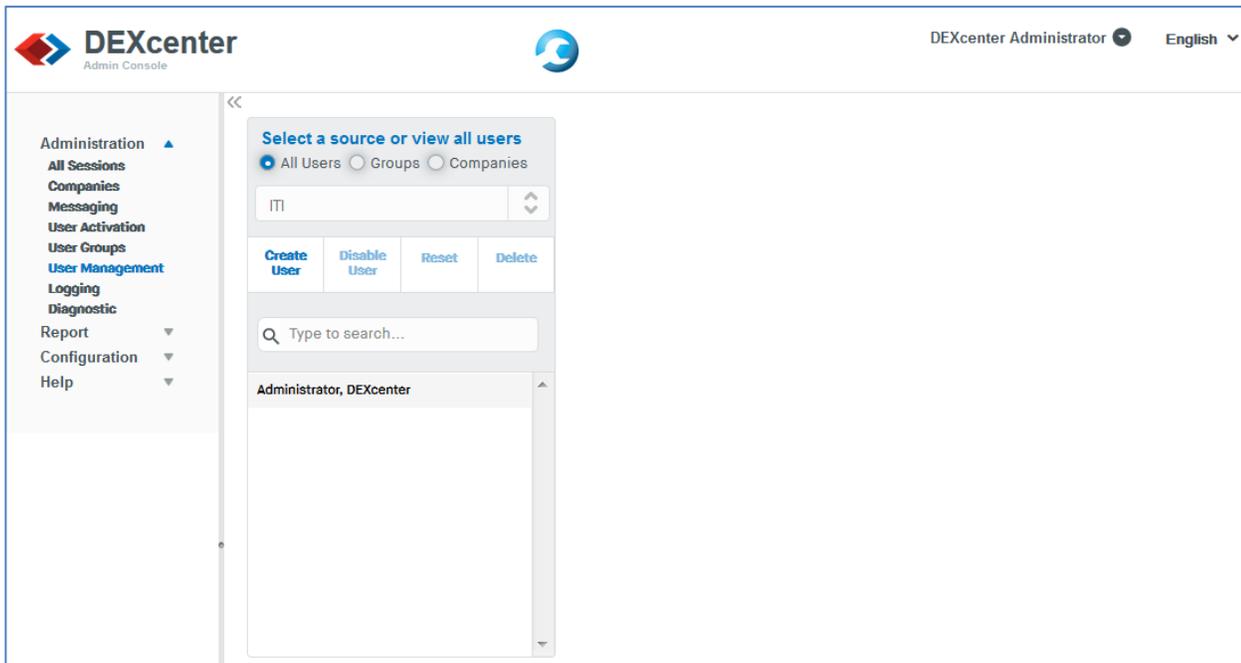
copyrighted work and all information are the
effective owners; might contain trade secrets and
in part, be used, duplicated, or disclosed for any
or written permission of its respective owners.

Chapter 3. User Management

An Administrator manages DEXcenter Users by selecting the “User Management” menu. The administrator has these options available:

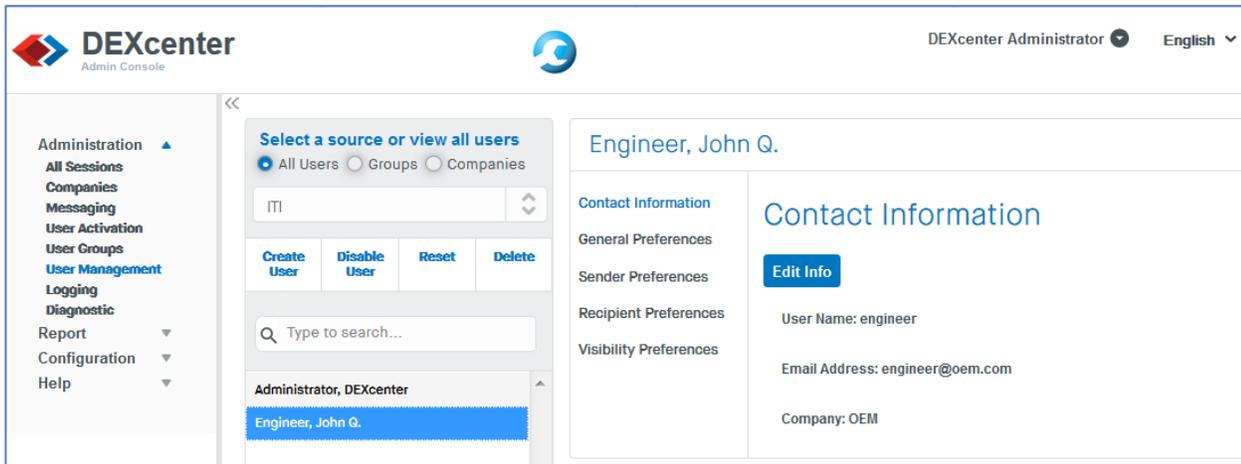
- Creating (Adding) new User Profiles
- Viewing and Modifying Existing Users
- Disabling User Profiles
- Deleting User Profiles
- Unlocking User Profiles

Select “Administration”, “User Management” to display the User Editor page where User Profiles can be created, modified, deleted, disabled, or unlocked.



User Profiles

User Profiles have 5 distinct sections which are in separate sections on the right side of the page. When a user profile is selected, these section tabs appear. To view or edit any section, simply click on the tab. A form with the parameters for that section is displayed.



Contact Information Section – basic contact information.

General Preferences Section – Overall system preferences which control the individual user’s DEXcenter operation.

Sender Preferences Section – Preferences which control DEXcenter operations when this User is Creating Sessions to send data.

Recipient Preferences Section – Preferences which define the data this User wants to receive when others send sessions to him.

Visibility Preferences Section – parameters to control the groups to which this user belongs as well as the groups and individual users which this user can select.

Adding User Profiles

Select “Create User” button to add a new user. At a minimum, the Contact information section and the Visibility Preferences sections should be completed. The other profile sections will automatically be set to default entries. Modify the parameters as appropriate. It is helpful to set all default parameter values as desired before starting to create users. That way fewer parameters need to be changed. The process for setting the defaults is described later in this chapter.

Click the “Create” button at the bottom of the page to save the new user.

The screenshot displays the DEXcenter Admin Console interface. On the left is a navigation menu with categories like Administration, All Sessions, Companies, Messaging, User Activation, User Groups, User Management, Logging, Diagnostic, Report, Configuration, and Help. The main content area is titled 'Edit Contact Information' and is divided into several sections: Contact Information, General Preferences, Sender Preferences, Recipient Preferences, and Visibility Preferences. The 'Contact Information' section contains the following fields: User Name (supplier), Password (masked with dots), Confirm Password (masked with dots), First Name (Sally), Middle Name (empty), Last Name (Supplier), Company (ITI), Address (empty), Phone Number (empty), Mobile Phone Number (empty), Fax Number (empty), Email Address (empty and highlighted with a red border), Alternate Email (empty), Title (empty), and Department (empty). The 'Authorities' section shows a list of roles: ROLE_REPORT, ROLE_USER (highlighted in blue), ROLE_SCA, and ROLE_ADMIN. At the bottom of the form are three buttons: Create, Reset, and Cancel.

Note that a Company selection is required. Create a Company using the Administration, Company menu if the desired Company does not exist.

The Fields that show a red circle to the right of the field are required fields and must be entered. If a field has been incorrectly set or a required field omitted, DEXcenter will not allow the profile to be saved and will display a message at the top of the page indicating the parameter is missing or does not meet requirements and will highlight the affected field box in red.

Contact Information

General Preferences

Sender Preferences

Recipient Preferences

Visibility Preferences

Edit Contact Information

Invalid email address

User Name *

Password

Confirm Password

First Name *

Middle Name

Last Name *

Company

Address

Phone Number

Mobile Phone Number

Fax Number

Email Address *

Alternate Email

Title

Department

Authorities

- ROLE_REPORT
- ROLE_USER
- ROLE_SOA
- ROLE_ADMIN

Contact Information

General Preferences

Sender Preferences

Recipient Preferences

Visibility Preferences

Edit Contact Information

No password entered.

User Name *

Password *

Confirm Password

First Name *

Middle Name

Last Name *

Contact Information

The Contact Information contains general information about the user including name, user id, password, email, telephone, etc. Each entry is described below.

The screenshot shows the DEXcenter Admin Console interface. On the left is a navigation menu with categories like Administration, All Sessions, Companies, Messaging, User Activation, User Groups, User Management, Logging, Diagnostic, Report, Configuration, and Help. The main content area is titled 'Edit Contact Information' and contains several sections: 'Contact Information', 'General Preferences', 'Sender Preferences', 'Recipient Preferences', and 'Visibility Preferences'. The 'Contact Information' section includes fields for User Name (supplier), Password (masked), Confirm Password (masked), First Name (Sally), Middle Name, Last Name (Supplier), Company (ITI), Address, Phone Number, Mobile Phone Number, Fax Number, Email Address (highlighted with a red dashed border), Alternate Email, Title, and Department. At the bottom, there is an 'Authorities' dropdown menu showing options like ROLE_REPORT, ROLE_USER, ROLE_SOA, and ROLE_ADMIN. The 'Email Address' field is highlighted with a red dashed border, indicating it is a required field. There are 'Create', 'Reset', and 'Cancel' buttons at the bottom right of the form.

Information to be entered includes:

| | |
|-------------|--|
| Username* | The id that the user uses to log into DEXcenter. Note that the ID is case sensitive. |
| First Name* | The user's first or given name which is visible to other users. |
| Last Name* | The user's last or family name which is visible to other users. |
| Password* | The user's login password (Must conform to configured password policies- see below). |

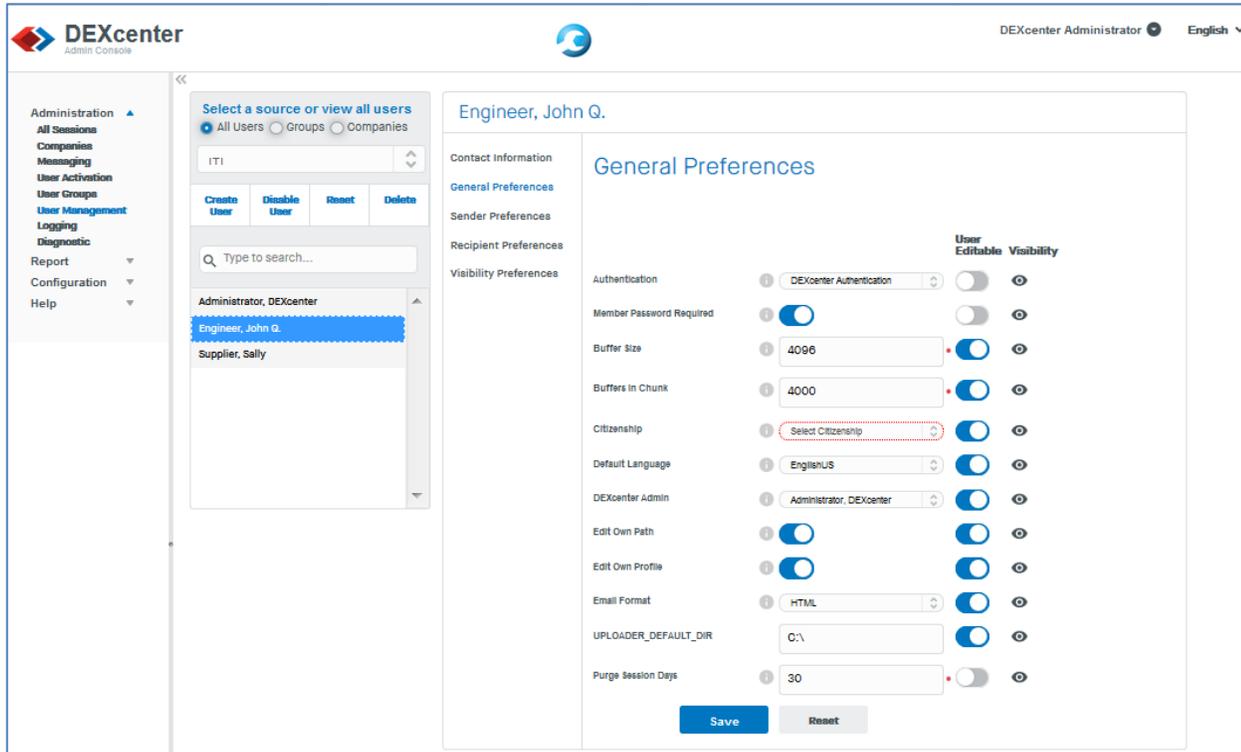
| | |
|------------------------------|---|
| | <p>A password is only required for DEXcenter authentication. It is not required for LDAP or SSO authentication.</p> <p>The pink background will remain on the box until the policies are satisfied. Mouse over or click on the box to see what requirements must still be met.</p> |
| Confirm Password* | Retype the password for verification. The box background will remain pink until the passwords match. |
| Company* | Company name. Use pulldown to select a Company. If the desired company does not exist, create one at Administration, Companies before proceeding. The address information will be inherited from the Company. |
| Department | A department or other organizational unit within the Company to further distinguish it. |
| Email* | The user's e-mail address |
| User specific address fields | Although the main address comes from the Company, the user can also enter additional unique address information (bldg, mail stop, etc) |
| Phone numbers | Phone, mobile phone, and fax can be entered. |
| Title | The User's title. |
| Alternate email | An alternate email can be entered. |
| Role* | <p>Roles define the authority the User has within DEXcenter. Most users will have only ROLE_USER which provides access to the DEXcenter user application. ROLE_ADMIN is required to access the AdminConsole application.</p> <p>ROLE_CONFIG is required to access the Configuration section of the AdminConsole.</p> <p>ROLE_SOA is required to access DEXcenter using the SOA API capability.</p> <p>ROLE_REPORT is required to generate reports from within the AdminConsole.</p> |

Note that required fields are displayed with an * above.

Click the "Create" button at the bottom to create the user profile.

General Preferences

General Preferences define key parameters affecting the User's operation of DEXcenter. Each entry is described below.



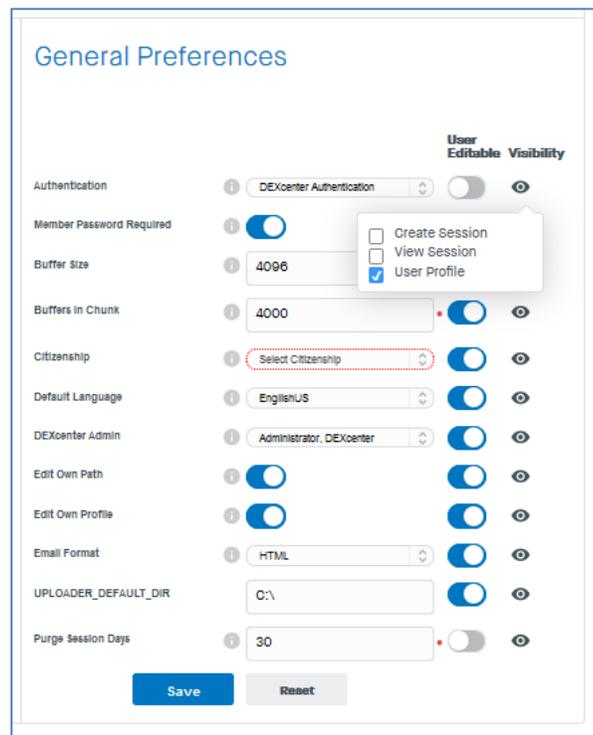
| | |
|--------------------------------|---|
| Default Language | Specifies the language in which DEXcenter pages are displayed. |
| DEXcenter Administrator | Specifies the assigned DEXcenter Administrator who receives email messages if the User's sessions fail. |
| Purge Days | The number of days after which a User's Sessions will be removed. |
| Authentication | Specifies the User's Authentication method (DEXcenter, LDAP, SSO). |
| User Password Required | Specifies whether a User is required to enter a password. For DEXcenter authentication, a password is required. For LDAP or SSO, it is not. |
| Buffer Size / Buffers in Chunk | Specifies the buffer size and the number of buffers which are processed together for uploading files. |
| Citizenship | Specifies the User's Citizenship |
| Edit Own Profile | If NO, the User cannot edit any part of their own profile. If YES, the member can edit part or all of their profile. A similar setting for individual Preference parameters can |

| | |
|--------------------------|--|
| | further limit member privileges to edit certain parts of their profile. |
| Edit Own Path | Determines if the User can edit their translation paths. |
| Email format | Specifies HTML or text as the email format. |
| Upload Default Directory | Specifies the default directory which appears in the browser when selecting files. |

Note that for most parameters, the Administrator can control whether or not the User can edit a parameter in their profile or override in the Create Session form. To prevent the user from being able to edit a parameter, click on the box next to the parameter under “User Editable” column to remove the check mark.

In addition to allowing the user to edit a parameter, the Administrator can also control which parameters are even visible to the User. If the Administrator clicks on the Visibilities button to the far right of the entry, a pop up dialogue appears which controls where the parameters are visible.

- If “Create Session” is checked, the parameter is visible in the Create Session overrides.
- If “User Profile” is selected, the parameter shows in the User’s Profile. Note that this is independent of whether or not a user can edit the parameter. A parameter can be visible but still not be editable.
- If “View Session” is selected, the parameter may be visible on the session page if appropriate.



Sender Preferences

The Sender Preferences section specifies the default DEXcenter behavior when the User is Sending sessions to others.

There are both General Parameters which apply for all Action types and there are other parameters which apply only for specific Action types. Select the desired Action from the “Display Parameters For:” pulldown at the top of the page to view and set Action specific parameters.

Engineer, John Q.

Contact Information

General Preferences

Sender Preferences

Recipient Preferences

Visibility Preferences

Sender Preferences

Display Parameters For:

General Parameters

| | | User Editable | Visibility |
|------------------------------|--|-------------------------------------|--------------------------|
| Default Action Type | <input type="text" value="Transmit Only"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Session Priority | <input type="text" value="1"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| CC Email Sender | <input type="text"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| BCC Email Sender | <input type="text"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| CC Self | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Include Translated Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Include Log Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Include Original Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Include Quality Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Include Quality IQJZ Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Include Quality REPORT Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Include Quality PDF Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Action Specific Parameters

| | | | |
|--|--------------------------|-------------------------------------|--------------------------|
| Expand Compressed | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Review Transmit Results Before Sending | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Engineer, John Q.

Contact Information

General Preferences

Sender Preferences

Recipient Preferences

Visibility Preferences

Sender Preferences

Display Parameters For: TRANSLATE MODEL FILES

General Parameters

| | | User Editable | Visibility |
|------------------------------|-------------------------------------|-------------------------------------|-----------------------|
| Default Action Type | Transmit Only | <input type="checkbox"/> | <input type="radio"/> |
| Session Priority | 1 | <input checked="" type="checkbox"/> | <input type="radio"/> |
| CC Email Sender | | <input checked="" type="checkbox"/> | <input type="radio"/> |
| BCC Email Sender | | <input checked="" type="checkbox"/> | <input type="radio"/> |
| CC Self | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Translated Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Log Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Original Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Quality Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Quality IQJZ Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Quality REPORT Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Quality PDF Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |

Action Specific Parameters

| | | | |
|---|-------------------------------------|-------------------------------------|-----------------------|
| CATEXP Multiple Model Grouping | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Include Intermediate Files | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="radio"/> |
| Review Translation Results Before Sending | <input type="checkbox"/> | <input type="checkbox"/> | <input type="radio"/> |

Save **Reset**

Sender Processing Preferences are described below. Note that not all parameters may be visible for your DEXcenter instance. Parameters which are not applicable to your site can be disabled and thus would not be shown.

| PREFERENCE | DESCRIPTION |
|---------------------|---|
| Default Action Type | Determines the User's default action type displayed on the Create Session form. A User can be restricted to only one action type by removing the User Editable privilege. |
| Session Priority | Can set a different default priority for users when multiple jobs are simultaneously queued. |

| | |
|------------------------------|---|
| CC email sender | Email addresses here will automatically receive email notifications whenever the User does. This does not allow them access to the sessions themselves but only the email. |
| BCC email sender | Email addresses here will automatically receive bcc email notifications whenever the User does. This does not allow them access to the sessions themselves but only the email. |
| CC Self | If YES, specifies that the sender receives an email notification of the completed Session. |
| Include Original Files | If checked, the Sender sees the Originally submitted files in their sessions. This is the default condition for a Sender. |
| Include Translated Files | If checked, the Sender sees the Translated files delivered to Recipients in their sessions. |
| Include Intermediate Files | If checked, the Sender sees any Intermediate files created as a part of the processing. Examples include CAD neutral formats (STEP, IGES, DXF, etc) when CAD neutral translation methods are used and UPR when Proficiency translation method is used. |
| Include Log Files | If checked, then Log files are available in the Session. |
| Include Quality Files | If checked and Model Quality is included in the processing, then the Model Quality results are visible in the Session by clicking on the Quality value. The specific Quality files to be displayed are controlled by the other Include Quality "filetype" Files parameters. |
| Include Quality IQJZ Files | If checked and Include Quality Files is checked and Model Quality processing is enabled, then Model Quality IQJZ files will be displayed and available. |
| Include Quality Report Files | If checked and Include Quality Files is checked and Model Quality processing is enabled, then Model Quality Report files will be displayed and available. |
| Include Quality PDF Files | If checked and Include Quality Files is checked and Model Quality processing is enabled, then Model Quality PDF files will be displayed and available. |
| Expand Compressed Files | If YES, compressed files will be expanded to extract and process the individual files for Transmit Only sessions. If NO, compressed files will be transmitted as compressed files for Transmit Only sessions. Compressed files are automatically expanded |

| | |
|---|---|
| | when processing of CAD or other files contained in them is required. |
| Review Translation Results Before Sending | DEXcenter can be enabled to allow a user to review any translated results before they are automatically sent to the intended recipient. |
| Review Transmit Results Before Sending | DEXcenter can be enabled to allow a user to review any transmit results before they are automatically sent to the intended recipient. |
| Review Quality Results Before Sending | DEXcenter can be enabled to allow a user to review any Quality results before they are automatically sent to the intended recipient. |
| Review Compare Results Before Sending | DEXcenter can be enabled to allow a user to review any Compare results before they are automatically sent to the intended recipient. |
| CATEXP Multiple Model Grouping | If checked, and Catia V4 model files are being translated into Catia CATEXP files, then all V4 models are put into one CATEXP file. Otherwise individual CATEXP files will be created for each Catia V4 model file. |

Recipient Preferences

Recipient preferences specify how DEXcenter will process Sessions being sent to the User. Note that not all parameters may be enabled in your DEXcenter deployment.

The image displays two screenshots of the DEXcenter Recipient Preferences configuration interface.

General Parameters (TRANSLATE MODEL FILES):

- Approval Required: NO
- CC Email Recipient: [Empty]
- BCC Email Recipient: [Empty]
- Compression Method: None
- Compressed Results Filename: SESSION
- Include Directories in Compressed File: [Checked]
- Include Primary Target File in Compressed File: [Checked]
- Include Status File in Compressed File: [Checked]
- Include Original Files: [Checked]
- Include Log Files: [Checked]
- Include Quality IQJZ Files: [Checked]
- Include Quality REPORT Files: [Checked]
- Include Quality PDF Files: [Checked]
- Model Quality: [Checked]
- Transmission Method: DEXCENTER
- Create Session/subsession Directories in XMETH Root: [Checked]
- Email Frequency: One Email Per Session
- Email ZIP Contents: [Unchecked]
- ECO Documentation Method: [Empty]

Action Specific Parameters:

- Include Individual Parts: [Checked]
- Target 3D Application: Catia V4
- Target 3D Application Version: 422
- Target 3D File Format: CATIA_EXP
- Target 2D Application: Catia V4
- Target 2D Application Version: 422
- Target 2D File Format: CATIA_EXP
- Translation Method: TRANSMIT_NONCAD
- Include Intermediate Files: [Checked]
- Include Quality Files: [Checked]

Buttons: Save, Reset

Recipient Preferences are described below.

| PREFERENCE | DESCRIPTION |
|-----------------------|---|
| Approval Required | Determines if Approval is required for data delivered to this user. |
| Target 3D Application | Preferred Application for 3D parts and assemblies. Data will be delivered |

| | |
|--|--|
| | compatible with this Application. |
| Target 3D Application Version | Preferred Version of the 3D Application. |
| Target 3D File Format | The file format in which to deliver the CAD data. Possible choices (dependent upon your DEXcenter configuration) include NATIVE (the proprietary format of each CAD system), IGES, STEP, Parasolid, ACIS, CATIA_EXP, and PDF. |
| Target 2D Application | Preferred CAD system for 2D drawings. Data will be delivered compatible with this CAD system. |
| Target 2D Application Version | Preferred Version of the 2D Application. |
| Target 2D File Format | The file format in which to deliver the CAD data. Possible choices (dependent upon your DEXcenter configuration) include NATIVE (the proprietary format of each CAD system), IGES, DXF, and CATIA_EXP. |
| “Action” Method | If multiple methods are available for different “Action” types (eg Transmit, Translate, Compare, etc), this provides the ability to specify a preferred method. When processing data, DEXcenter automatically determines workflows based upon the source and target data. If a method is specified but no workflow with that Methods exists for that source and target combination, then the highest priority workflow available will be used. |
| CC email recipient | If email addresses are specified, then they will receive copies of emails sent to this user as a recipient. They do not have access to the Sessions themselves in DEXcenter. |
| BCC email recipient | If email addresses are specified, then they will receive bcc copies of emails sent to this user as a recipient. They do not have access to the Sessions themselves in DEXcenter. |
| Compression Method | Select GNU ZIP or ZIP to always have data sent to you in the selected compressed format. |
| Include Directories in Compressed File | If Checked, then directories will be included in the compressed file for different subsessions |
| Include Original Files | If checked, the User as Recipient sees the Originally submitted files in their sessions. |
| Include Intermediate Files | If YES, intermediate files will be provided in addition to any NATIVE file formats requested. Intermediate files include neutral formats (IGES, STEP, DXF) as well as any additional formats requested (JT, etc.) |

| | |
|--|--|
| Include Log Files | If checked, then Log files are available in the Session. |
| Include Quality Files | If checked and Model Quality is included in the processing, then the Model Quality results are visible in the Session by clicking on the Quality value. |
| Include Quality IQJZ Files | If checked and if Include Model Quality Results and Model Quality are also both checked, then Quality IQJZ files will be displayed and accessible. |
| Include Quality REPORT Files | If checked and if Include Model Quality Results and Model Quality are also both checked, then Quality Report files will be displayed and accessible. |
| Include Quality PDF Files | If checked and if Include Model Quality Results and Model Quality are also both checked, then Quality PDF files will be displayed and accessible. |
| JT Export | If YES and JT translators are configured, JT graphics files will be created when processing NATIVE models for you. |
| Model Healing | If YES, CADfix healing will be performed on any neutral files. |
| Model Quality | If YES and CADIQ is appropriately configured, CAD data will be analyzed for quality issues before being translated, and translated results compared to the originals. |
| Transmission Method | Specifies the method by which files are transmitted to you. If DEXcenter, then files are downloaded from the DEXcenter server using http or https as configured. If FTP or SFTP, then files are also FTP'ed or SFTP'ed to a specified FTP or SFTP server. The additional FTP or SFTP server access info must be specified. |
| Create Session / subsession directories in X METH root | If FTP or SFTP Transmission Methods (X METH) are defined, then checking this enables directories and subdirectories to be created within the root directory. If not checked, all files are put into the same specified directory. |
| Email frequency | Can be either Session or Subsession. If Session, then the User receives an email only once a session is totally completed. If Subsession, the User is notified each time a subsession within a session completes. |

Once all values have been set, select the “Apply” button to store this profile info.

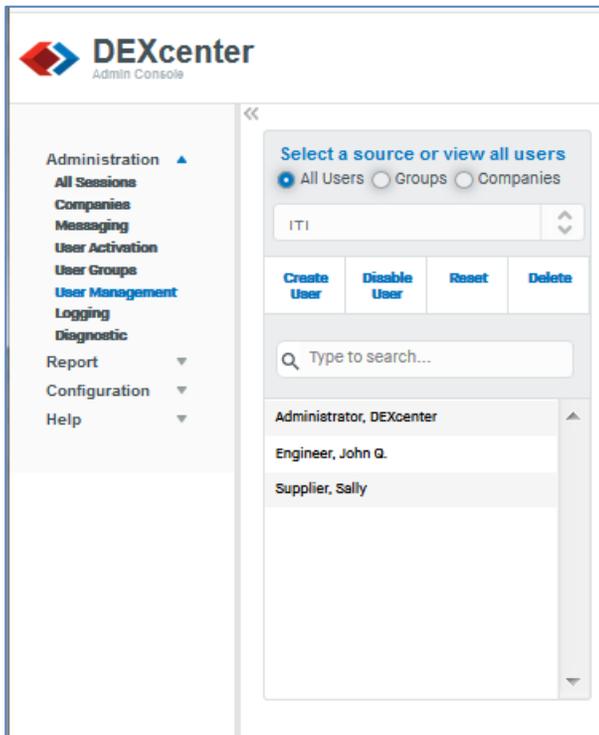
Visibility Preferences

The visibility preferences section is used to define the Groups to which this user belongs, and which groups and individuals are available for this user to select and send data files.

The screenshot displays the DEXcenter Admin Console interface. The top navigation bar includes the DEXcenter logo, a user profile icon, and the text "DEXcenter Administrator" and "English". A left sidebar contains a navigation menu with categories like Administration, All Sessions, Companies, Messaging, User Activation, User Groups, User Management, Logging, Diagnostic, Report, Configuration, and Help. The main content area is titled "Engineer, John Q." and features a "Visibility Preferences" section. This section includes a "Select Recipients From Groups" area with three dropdown menus. The first menu, labeled "Groups", has "Internal" selected. The second menu, labeled "Select Recipients From Groups", has "Internal" selected. The third menu, labeled "Select Recipients From Members", has "Administrator, DEXcenter" selected. Below these menus are "Unselect All", "Apply", and "Reset" buttons. A search bar and a list of users are visible in the upper left of the main content area.

Viewing, Modifying, Disabling, Deleting, and Unlocking Existing Users

Existing Users are displayed in the Users section in the center of the page. All Users are automatically displayed. The Users displayed can be filtered using several mechanisms.



Group – Select the Group radio button and then select a Group from the pulldown. Only members belonging to that Group are displayed.

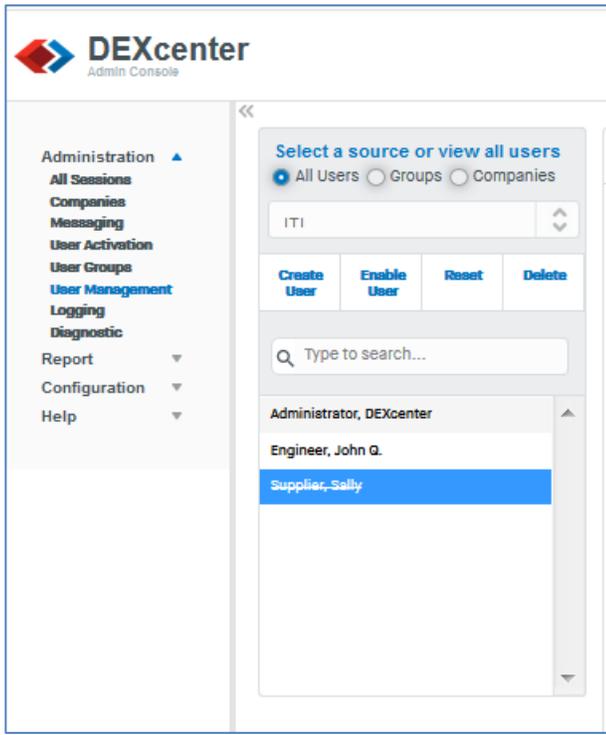
Companies– Select the Companies radio button and then select a Company from the pull down. Only Users which are affiliated with that Company are displayed.

To View a User’s Profile information, select the User from the box. The User’s profile information is displayed in the Contact and Preferences boxes.

To Modify a User’s profile, select the User from the box. Select the section to modify, modify the parameter(s) desired and then click the “Apply” button.

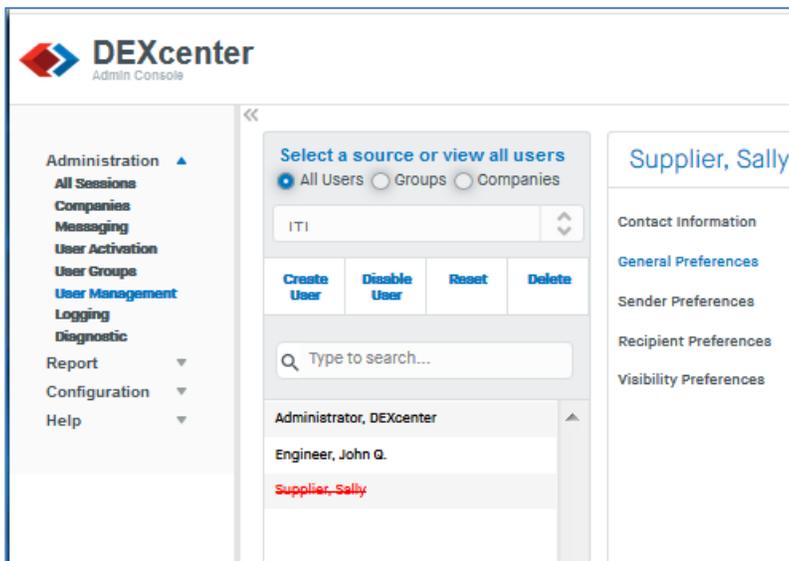
To Disable a User, select the User and then click the “Disable User” button. The User’s profile and login authorization are disabled. Disabled users appear with a strike though their name. A disabled user remains in the DEXcenter database and may be re-activated at any time. The Disable User / Enable User button is a toggle.

When users are “enabled”, the button displays “Disable User”. If a user is “disabled”, then the button displayed “Enable User”. To re-activate a user, select the user name and click Enable User

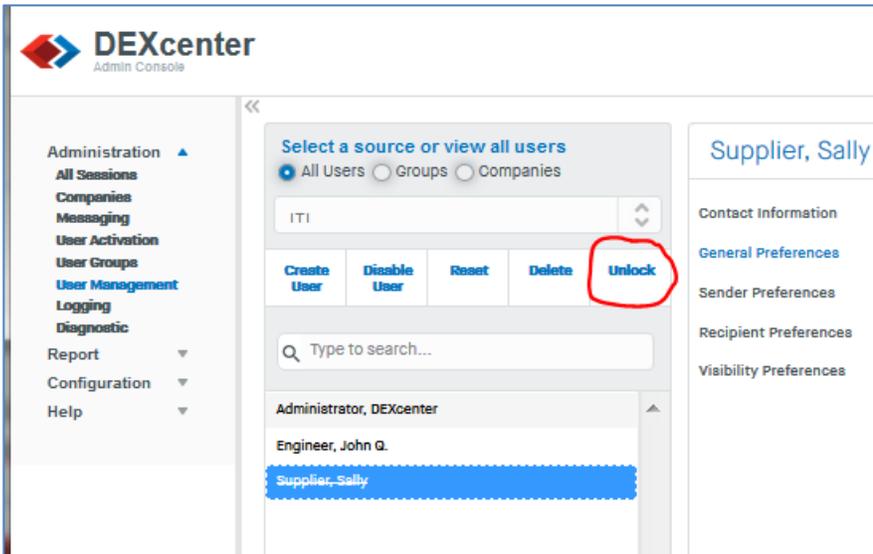


To Delete a User, select the User and then click the “Delete” button. The user and all sessions for that user are deleted.

A User’s Profile may be locked if they have more than the allowed number of login failures. In this case, their User Name appears in red and has a strikethrough line.



To Unlock their profile, select their name. An Unlock button will appear. Select Unlock to unlock selected user profiles.



Password Policies

DEXcenter has password policies used for DEXcenter authentication to ensure the safety and security of the data in the system. By default, all policies are enabled. The system administrator can disable or modify any of the policies by modifying the appropriate parameters in the DEXcenter database. Note that these policies do not apply to LDAP or SSO authentication. The authentication policies of those specific methods apply.

Defining Password Policies

The table below identifies each policy, provides a brief description, identifies the default value, and identifies the SYSTEM parameter in the DEXcenter database which enables the policy and sets the allowed value.

Password rules are enabled or disabled in the SYSTEM_PARAMETERS table along with the conditions to be checked. The “ENABLE” parameters turn the various rules on if Parameter Value = Y or off if Parameter Value =N. Companion parameters set the required values.

| Policy | Description | Default Value | SYSTEM Parameter |
|-----------------------|---|---------------|--------------------------------------|
| Length | Enable or disable min and max password length | Y | ENABLE_PASSWORD_LENGTH_RULE |
| Lower case alphabetic | Enables / disables requirement for lower case alphabetic chars | Y | ENABLE_PASSWORD_LOWER_CASE_CHAR_RULE |
| Upper case alphabetic | Enables / disables requirement for upper case alphabetic chars | Y | ENABLE_PASSWORD_UPPER_CASE_CHAR_RULE |
| Digits | Enables / disables requirement for numeric characters | Y | ENABLE_PASSWORD_DIGIT_RULE |
| Non-Alpha | Enables / disables requirement for non-alphabetic characters. | Y | ENABLE_PASSWORD_NON_ALPHA_CHAR_RULE |
| History | Enables / disables requirement of restricting password reuse | Y | ENABLE_PASSWORD_HISTORY_RULE |
| Dictionary | Enables / disables requirement that dictionary words cannot be used | Y | ENABLE_PASSWORD_DICTIONARY_RULE |
| Min Length | Minimum allowed length of password | 6 | PASSWORD_MIN_LENGTH |
| Max Length | Maximum allowed length of password | 20 | PASSWORD_MAX_LENGTH |
| Min Lower Case | Minimum # of lowercase characters required | 1 | PASSWORD_NUM_LOWER_CASE_CHARS |

| | | | |
|---------------------------|--|--------|---|
| Min Upper Case | Minimum # of uppercase characters required | 1 | PASSWORD_NUM_UPPER_CASE_CHARS |
| Min digits | Minimum # of digits (numeric) chars required | 1 | PASSWORD_NUM_DIGIT_CHARS |
| Min Non-Alpha | Minimum # of non-alphabetic characters | 1 | PASSWORD_NUM_NON_ALPHA_CHARS |
| Expiration | Age in days at which the password expires | 30 | PASSWORD_EXPIRATION_PERIOD |
| Expiration Notification | Days before password expiration when user is sent a notification of impending expiration | 5 | PASSWORD_EXPIRATION_NOTIFICATION_PERIOD |
| History | This number of most recently used passwords cannot be reused | 3 | PASSWORD_HISTORY_COUNT |
| Dictionary | Dictionary words are defined in PARAMETER_ALLOWED_VALUES table with parameter id of this parameter | <null> | PASSWORD_DICTIONARY |
| Max Failed Login Attempts | After this number of failed login attempts, the user account is locked. | 3 | MAX_FAILED_LOGIN_ATTEMPTS |

Using Password Policies

Some important notes about using password policies.

Users are required to change their password the first time they log in.

When a password is entered into a password field, the field border will change to red if the password policies have not been met.

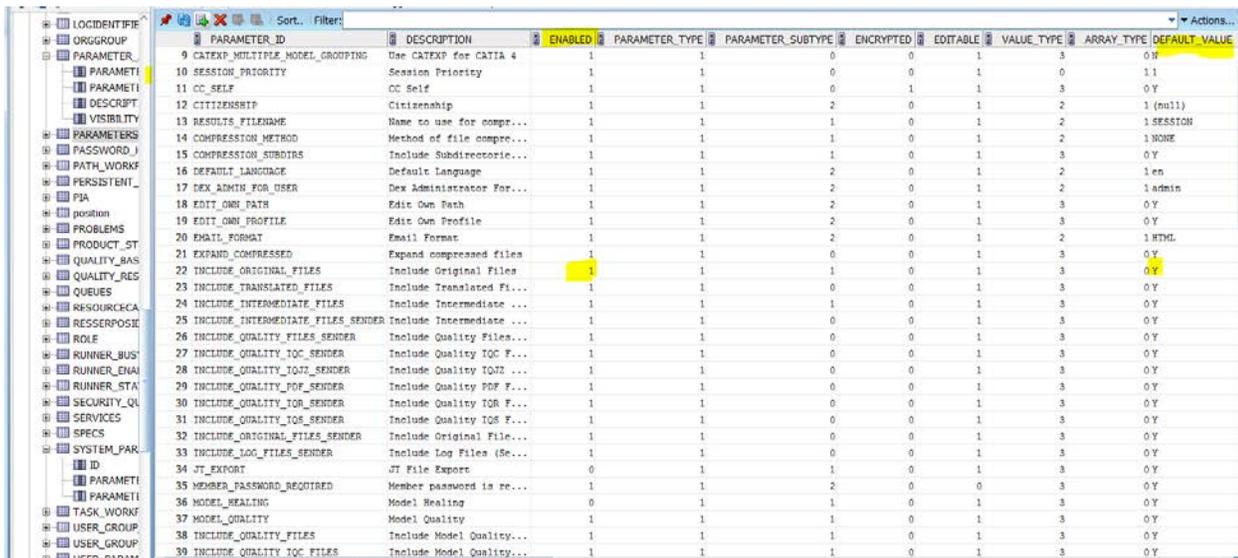
If the field border remains red after entering the password, hold the cursor over the field and a pop up will identify the rules in violation.

If a user fails to login successfully after the maximum number of allowed attempts, their account is locked. A message indicates this on the login page. They must contact an Administrator in order to have their account unlocked and optionally have their password reset.

Managing User Profile Parameters

DEXcenter is shipped with the most frequently used set of parameters enabled with their most common default values. Because different sites may have different CAD systems or different operating procedures, some parameters may not apply, or different default values may be desired. These parameters can be disabled to avoid confusion, or their default values modified. Parameters can be modified for the entire site (e.g. All Users) or only for selected users. There may be some power users who would like the additional functionality, but other users may find the options more confusing.

Parameters are modified in the database tables.



| PARAMETER_ID | DESCRIPTION | ENABLED | PARAMETER_TYPE | PARAMETER_SUBTYPE | ENCRYPTED | EDITABLE | VALUE_TYPE | ARRAY_TYPE | DEFAULT_VALUE |
|--------------|-----------------------------------|---------|----------------|-------------------|-----------|----------|------------|------------|---------------|
| 9 | CATEXP_MULTIPLE_MODEL_GROUPING | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 10 | SESSION_PRIORITY | 1 | 1 | 0 | 0 | 1 | 0 | 11 | |
| 11 | CC_SELF | 1 | 1 | 0 | 1 | 1 | 3 | | 0Y |
| 12 | CITIZENSHIP | 1 | 1 | 2 | 0 | 1 | 2 | | 1 (null) |
| 13 | RESULTS_FILENAME | 1 | 1 | 1 | 0 | 1 | 2 | | 1 SESSION |
| 14 | COMPRESSION_METHOD | 1 | 1 | 1 | 0 | 1 | 2 | | 1 NONE |
| 15 | COMPRESSION_SUBDIRS | 1 | 1 | 1 | 0 | 1 | 3 | | 0Y |
| 16 | DEFAULT_LANGUAGE | 1 | 1 | 2 | 0 | 1 | 2 | | 1 en |
| 17 | DEX_ADMIN_FOR_USER | 1 | 1 | 2 | 0 | 1 | 2 | | 1 admin |
| 18 | EDIT_OWN_PATH | 1 | 1 | 2 | 0 | 1 | 3 | | 0Y |
| 19 | EDIT_OWN_PROFILE | 1 | 1 | 2 | 0 | 1 | 3 | | 0Y |
| 20 | EMAIL_FORMAT | 1 | 1 | 2 | 0 | 1 | 2 | | 1 HTML |
| 21 | EXPAND_COMPRESSED | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 22 | INCLUDE_ORIGINAL_FILES | 1 | 1 | 0 | 1 | 1 | 3 | | 0Y |
| 23 | INCLUDE_TRANSLATED_FILES | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 24 | INCLUDE_INTERMEDIATE_FILES | 1 | 1 | 1 | 0 | 1 | 3 | | 0Y |
| 25 | INCLUDE_INTERMEDIATE_FILES_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 26 | INCLUDE_QUALITY_FILES_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 27 | INCLUDE_QUALITY_IOC_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 28 | INCLUDE_QUALITY_IQZ_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 29 | INCLUDE_QUALITY_PDF_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 30 | INCLUDE_QUALITY_IQR_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 31 | INCLUDE_QUALITY_IQS_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 32 | INCLUDE_ORIGINAL_FILES_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 33 | INCLUDE_LOG_FILES_SENDER | 1 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 34 | JT_EXPORT | 0 | 1 | 0 | 0 | 1 | 3 | | 0Y |
| 35 | MEMBER_PASSWORD_REQUIRED | 1 | 1 | 2 | 0 | 0 | 3 | | 0Y |
| 36 | MODEL_HEALING | 0 | 1 | 1 | 0 | 1 | 3 | | 0Y |
| 37 | MODEL_QUALITY | 1 | 1 | 1 | 0 | 1 | 3 | | 0Y |
| 38 | INCLUDE_QUALITY_FILES | 1 | 1 | 1 | 0 | 1 | 3 | | 0Y |
| 39 | INCLUDE_QUALITY_IOC_FILES | 1 | 1 | 1 | 0 | 1 | 3 | | 0Y |

Two tables are used to define parameters. An overall Parameters table and a User Parameters table. To disable a parameter for all users, change the Enabled value to “0”. The default value of the parameter for new users can also be set. Parameters for individual users can be changed in the User Parameters table. It may be more convenient to directly modify parameters in the database when a change affecting all or many users is being made.

To disable a parameter, set the value in the “Enabled” column to 0. To change the default value of a parameter to be different, change the value in the “Default_Value” column. Note that the value must be consistent with the type of the value expected (e.g. number, upper case alpha, Y, N, etc.) or unexpected results may occur.

No other columns associated with the parameter should be modified.

Chapter 4. User Groups

User Groups can be used both for convenience and for controlling user access to various functions.

User Groups can be Added, Deleted or Edited from the DEXcenter AdminConsole, “Administration, User Groups” menu. Site defined User Groups can be used to control access to Repository and TDP Repository file systems, to simplify recipient selection, to limit which recipients can be selected, for specifying Approvers and for other organizational purposes. This is also where Approval Groups and Approvers are defined.

View and Modify Groups

To view Groups defined in the DEXcenter installation, select “Administration”, “User Groups”. The Groups are displayed on the web page form. Select any Group in the “Select Group” box and the name, description, and members are displayed in the other boxes. Use the “To” and “From” arrows to add and remove users from a selected Group. Change the Description in the top right box. When done with modifications, select the “Save” button.

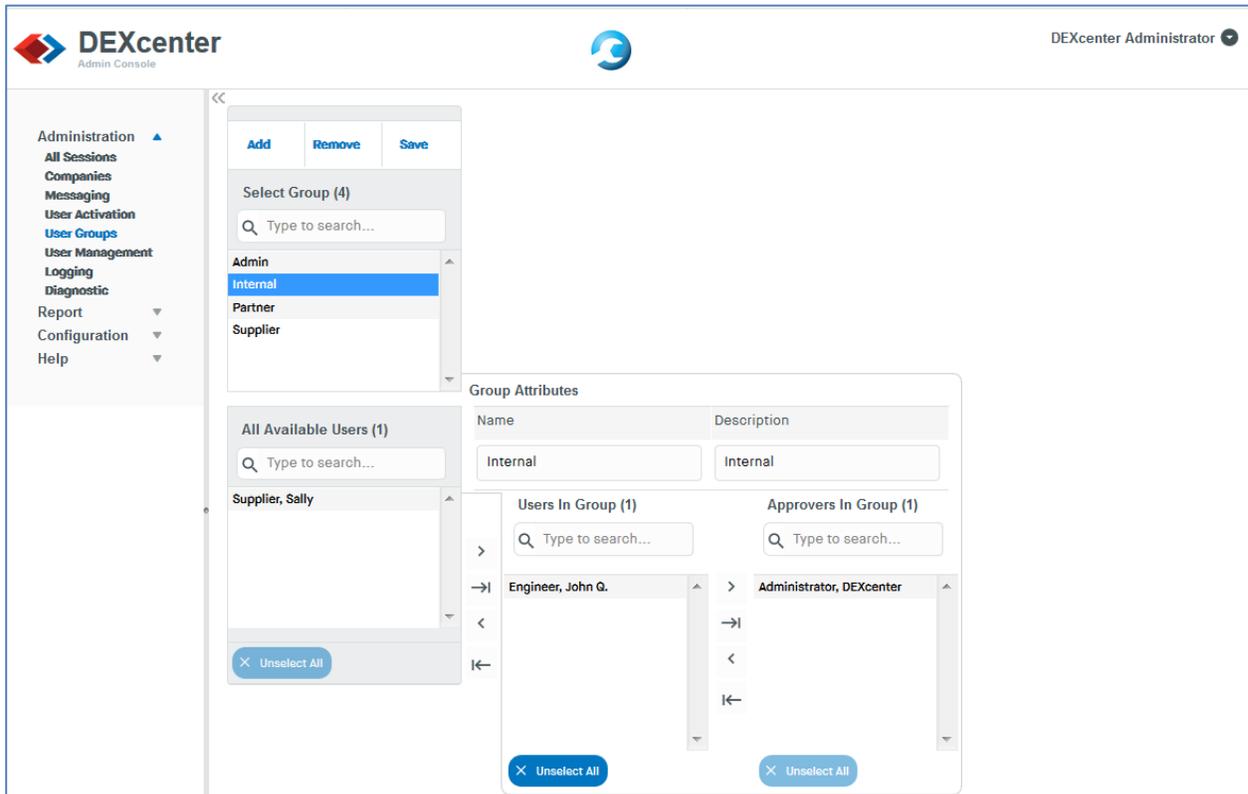
The screenshot displays the DEXcenter Admin Console interface for managing User Groups. The top navigation bar includes the DEXcenter logo, a user profile icon, and the text "DEXcenter Administrator". A left-hand sidebar lists various administrative functions, with "User Groups" highlighted. The main content area is divided into several sections:

- Select Group (4):** A search box and a list of group types: Admin, Internal (selected), Partner, and Supplier.
- Group Attributes:** A table with two columns: Name and Description. The "Internal" group is shown with "Internal" in both fields.
- All Available Users (2):** A search box and a list of users: Engineer, John Q. and Supplier, Sally. An "Unselect All" button is at the bottom.
- Users In Group (1):** A search box and a list containing "Administrator, DEXcenter". An "Unselect All" button is at the bottom.
- Approvers In Group (0):** A search box and an empty list. An "Unselect All" button is at the bottom.

Navigation arrows are used to move users between the "All Available Users", "Users In Group", and "Approvers In Group" sections. At the top of the main content area, there are "Add", "Remove", and "Save" buttons.

Approvers and Approval Groups

If using Approval, Approvers and Approval Groups are defined here. A group becomes an Approval Group by adding an Approver to the Group. To add an Approver, first add the User into the Group and then move the User into the Approvers box using the arrows. Note that the Approval System parameters must be enabled in the database for the Approver functions to work.



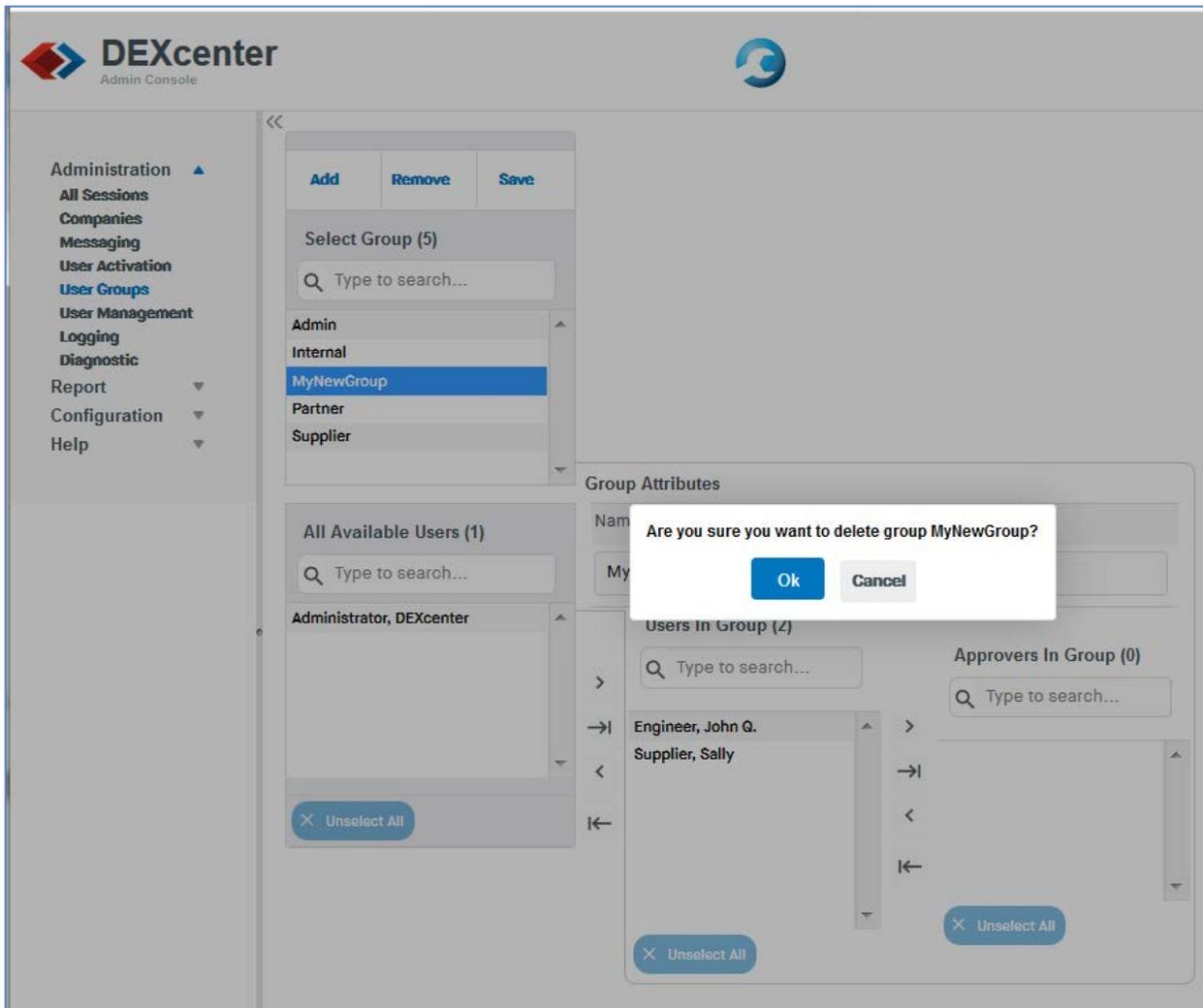
Add Groups

To add a Group, select the “Add” button, complete the form and then select the “Save” button.

The screenshot displays the DEXcenter Admin Console interface for adding a group. The top left features the DEXcenter logo and 'Admin Console' text. A sidebar on the left contains navigation links: Administration (expanded), All Sessions, Companies, Messaging, User Activation, User Groups (highlighted), User Management, Logging, Diagnostic, Report, Configuration, and Help. The main content area is titled 'Add' and contains 'Remove' and 'Save' buttons. Below these is a 'Select Group (5)' dropdown menu with a search field and a list of groups: Admin, Internal, MyNewGroup (selected), Partner, and Supplier. To the right, the 'Group Attributes' section includes a table with columns 'Name' and 'Description', showing 'MyNewGroup' and 'My New Group'. Below this are three sections: 'All Available Users (1)' with a search field and a list containing 'Administrator, DEXcenter'; 'Users In Group (2)' with a search field and a list containing 'Engineer, John G.' and 'Supplier, Sally'; and 'Approvers In Group (0)' with a search field. Each of these three sections has an 'Unselect All' button at the bottom.

Removing Groups

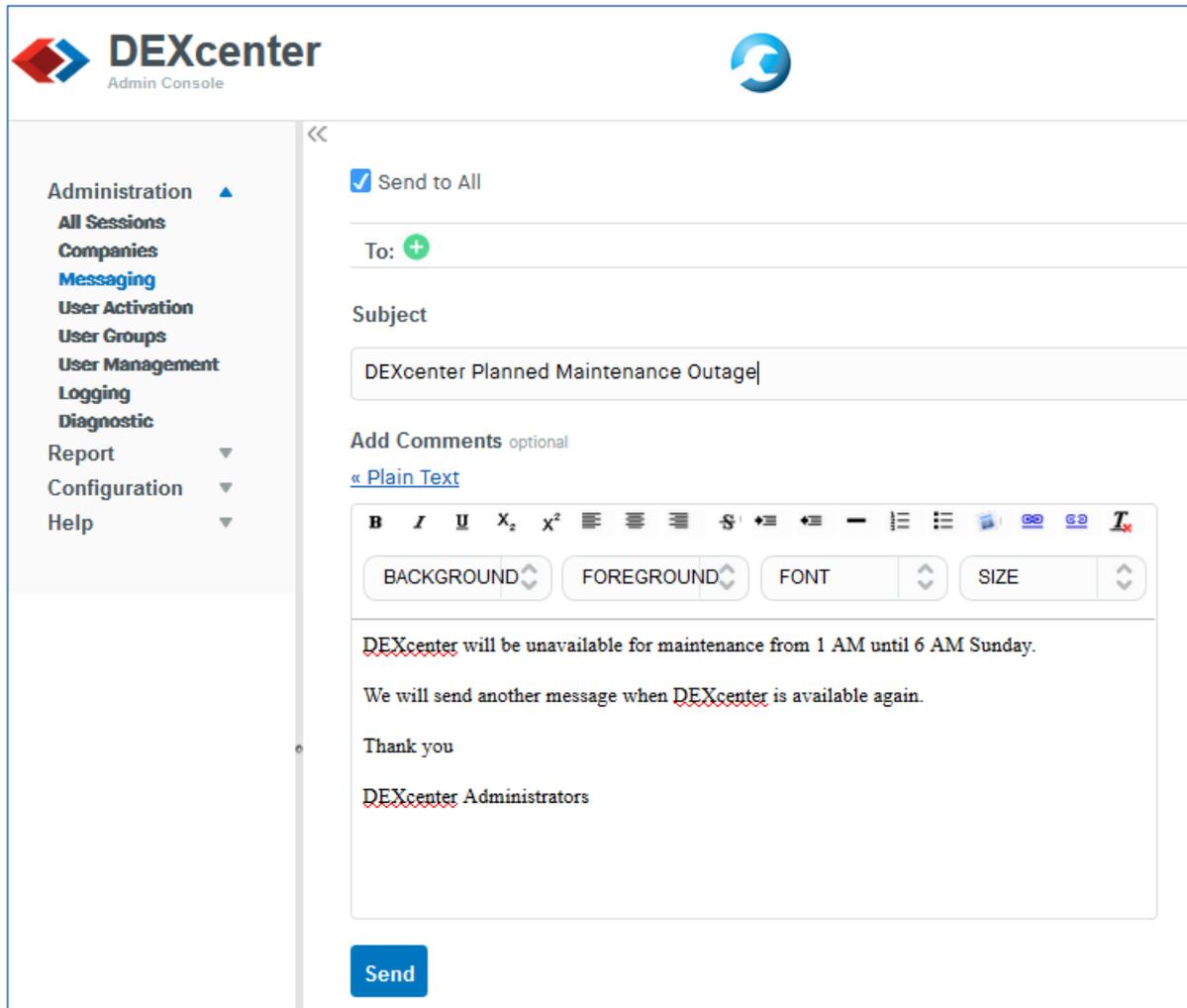
To Remove a Group or Groups, select the Group(s) and select the “Remove” Button. Then click “OK” in the pop up dialogue to confirm.



Chapter 5 - Messaging

The Administration -> Messaging function allows a message to be sent to all or selected DEXcenter users. Select “Send to All” box to send message to all users or use the “To” button to select specific users. Enter the Subject and message as desired and click the “Send” button. HTML tags are available for formatting.

Note that “Send to All” generates as many emails as there are users defined.



The screenshot shows the DEXcenter Admin Console interface for sending a message. On the left is a navigation menu with options: Administration (expanded), All Sessions, Companies, Messaging (highlighted), User Activation, User Groups, User Management, Logging, Diagnostic, Report, Configuration, and Help. The main content area is titled "Messaging" and includes a "Send to All" checkbox (checked), a "To:" field with a plus sign, and a "Subject" field containing "DEXcenter Planned Maintenance Outage". Below the subject field is an "Add Comments" section with an "optional" label and a "Plain Text" link. A rich text editor toolbar is visible with icons for bold, italic, underline, subscript, superscript, bulleted list, numbered list, indent, outdent, link, unlink, and text color. Below the toolbar are four dropdown menus for "BACKGROUND", "FOREGROUND", "FONT", and "SIZE". The message body contains the following text: "DEXcenter will be unavailable for maintenance from 1 AM until 6 AM Sunday.", "We will send another message when DEXcenter is available again.", "Thank you", and "DEXcenter Administrators". A blue "Send" button is located at the bottom left of the message composition area.

Chapter 6. User Activation

The User Activation function allows the Administrator to activate user accounts for users who have requested them. Users who have requested an account on the Login page will appear on this page. Select the user, modify the user parameters as appropriate and select Approve to approve the account. The user will automatically be notified about their account approval if the “Notify user via email” box is checked.

Note that to ensure Companies are consistent, the user supplied Company information is not used directly. Rather it is supplied as reference to help the user in choosing the appropriate Company. Once a Company is selected, the user is prompted to replace the user supplied Company information.

- Administration
 - All Sessions
 - Companies
 - Messaging
 - User Activation**
 - User Groups
 - User Management
 - Reports
 - Logging
 - Diagnostic
- Configuration
 - Datastores
 - System Preferences
 - User Preferences
- Help
 - Documents
 - About
 - Java Verification
 - Support

Approve
Remove

Notify user via email

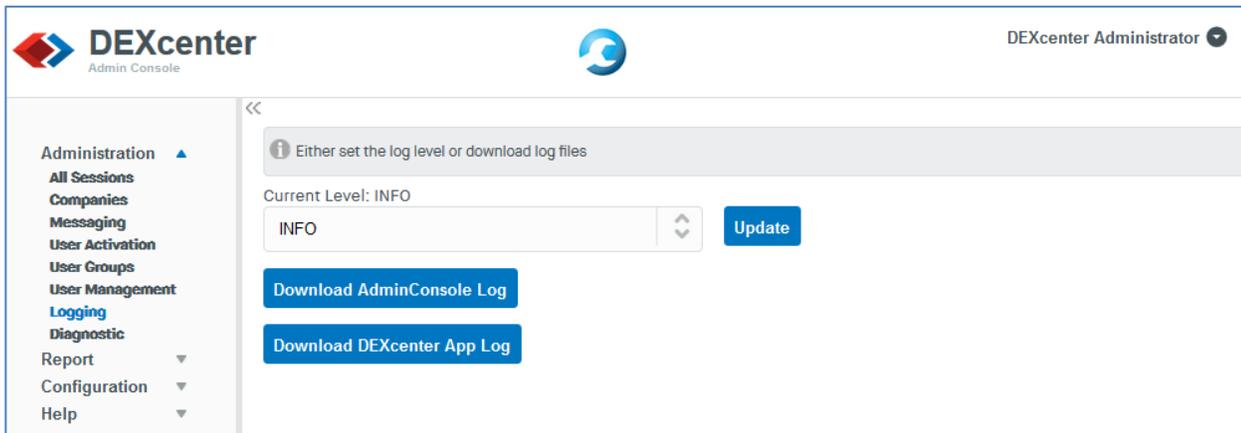
Type to search...
Partner, Paul

Requested On 2015-03-06 15:25:35

| | | |
|---------------------|--|----|
| Username | none | ** |
| First Name | Paul | ** |
| Middle Name | | |
| Last Name | Partner | ** |
| Password | •••••• | ** |
| Confirm Password | | ** |
| Title ⓘ | Owner | ** |
| Email Address ⓘ | paul.partner@designpartners.com | ** |
| Phone Number ⓘ | | |
| Citizenship ⓘ | United States | ** |
| Email Format ⓘ | HTML | ** |
| Companies | | ** |
| Company Address | | |
| Groups ⓘ | Internal Supplier Partner Admin | ** |
| Visible Groups ⓘ | Internal Supplier Partner Admin | ** |
| Internal ID ⓘ | none | |
| Organization ⓘ | | |
| Company Name ⓘ | Design Partners | |
| Company Address 1 ⓘ | 100 S. Lake Avenue | |
| Company Address 2 ⓘ | | |
| Company City ⓘ | Milwaukee | |
| Company State ⓘ | WI | |
| Company Zip Code ⓘ | 33333 | |
| Company Country ⓘ | US | |

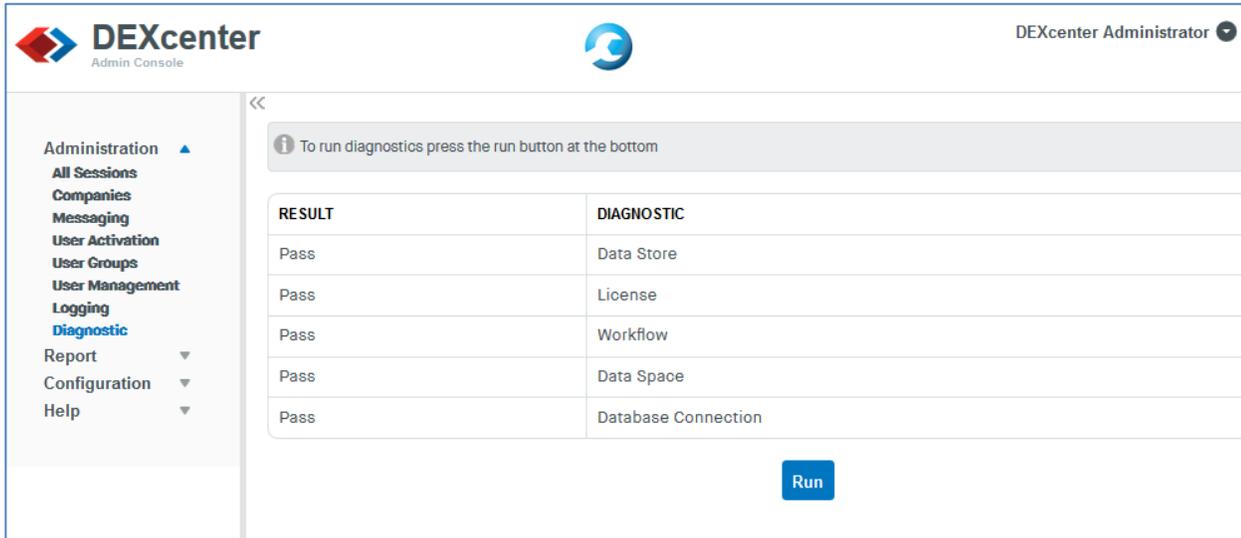
Chapter 7. Logging

The Logging function allows the administrator to change the logging level or review the logs associated with the DEXcenter or AdminConsole applications.



Chapter 8. Diagnostic

The Diagnostic function provides some basic diagnostics regarding the health of the DEXcenter deployment. Simply click the Run button. A passing diagnostic shows with a RESULT equal to "Pass". A failing diagnostic shows a RESULT of "Failed"



The screenshot shows the DEXcenter Admin Console interface. The top navigation bar includes the DEXcenter logo, a user profile icon, and the text 'DEXcenter Administrator'. A left sidebar contains a menu with items like Administration, All Sessions, Companies, Messaging, User Activation, User Groups, User Management, Logging, Diagnostic (highlighted), Report, Configuration, and Help. The main content area features a table with the following data:

| RESULT | DIAGNOSTIC |
|--------|---------------------|
| Pass | Data Store |
| Pass | License |
| Pass | Workflow |
| Pass | Data Space |
| Pass | Database Connection |

A blue 'Run' button is located at the bottom right of the table area. An information icon and text above the table state: 'To run diagnostics press the run button at the bottom'.

Data Store – Verifies that connectivity exists to the defined Data Store.

License – verifies that the DEXcenter license server and licenses are valid.

Workflow – verifies that DEXcenter can connect to the workflow engine.

Data Space - verifies that sufficiency disk space is available.

Database Connection – verifies that the DEXcenter database can be accessed.

Click on the result (Pass or Fail) to get more information about the diagnostic.

The screenshot shows the DEXcenter Admin Console interface. The top navigation bar includes the DEXcenter logo, a refresh icon, and the user 'DEXcenter Administrator' with a language dropdown set to 'English'. A left sidebar contains a menu with items like Administration, All Sessions, Companies, Messaging, User Activation, User Groups, User Management, Logging, Diagnostic (highlighted), Report, Configuration, Datastores, System Preferences, and User Preferences. The main content area features a table of diagnostic results and a 'Run' button.

Information: To run diagnostics press the run button at the bottom

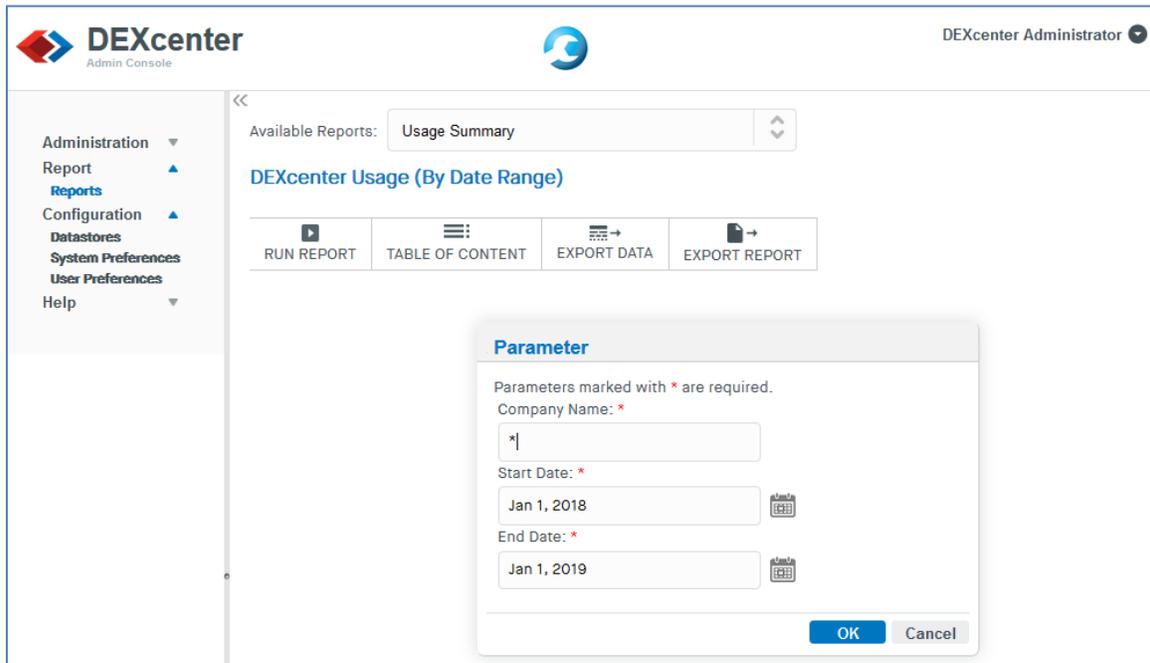
| RESULT | DIAGNOSTIC |
|--------|--|
| Pass | Data Store |
| Pass | Data Store Connection Test Succeeded. Local Disk Usage = 91.7163% --- DATASTORE VALIDATION DIAGNOSTIC SUCCESSFUL --- |
| Pass | WORKFLOW |
| Pass | Data Space |
| Pass | Database Connection |

Run

Section 2. Reports

Chapter 1. Reports

DEXcenter includes an interactive Report Generation capability. Numerous standard reports are provided, and additional reports can be added. Start by selecting a report. A dialogue box will then appear asking for the criteria to be used in generating the report. Then click the “OK” button to generate the report.



The report will be displayed on the screen.

DEXcenter Admin Console DEXcenter Administrator English

Administration
 Report
 Reports
 Configuration
 Help

Available Reports: Usage Summary

DEXcenter Usage (By Date Range)

RUN REPORT TABLE OF CONTENT EXPORT DATA EXPORT REPORT

SHOWING PAGE 1 OF 1 GO TO PAGE: Go

Usage Summary

(January 1, 2018 to January 1, 2019)

| | |
|--------------------|----|
| MBs Exchanged: | 1 |
| Files Exchanged: | 12 |
| Sessions: | 3 |
| Outside Companies: | 1 |
| ITI Sites: | 1 |
| Registered Users: | 3 |

Number of Sessions

| Month | Sessions |
|--------|----------|
| Jan-18 | 3 |
| Feb-18 | 0 |
| Mar-18 | 0 |
| Apr-18 | 0 |
| May-18 | 0 |
| Jun-18 | 0 |
| Jul-18 | 0 |
| Aug-18 | 0 |
| Sep-18 | 0 |
| Oct-18 | 0 |
| Nov-18 | 0 |
| Dec-18 | 0 |

Number of Files Exchanged

| Month | Files Exchanged |
|--------|-----------------|
| Jan-18 | 12 |
| Feb-18 | 0 |
| Mar-18 | 0 |
| Apr-18 | 0 |
| May-18 | 0 |
| Jun-18 | 0 |
| Jul-18 | 0 |
| Aug-18 | 0 |
| Sep-18 | 0 |
| Oct-18 | 0 |
| Nov-18 | 0 |
| Dec-18 | 0 |

Number of Users

| Month | Total Users | Active Users |
|--------|-------------|--------------|
| Jan-18 | 1 | 1 |
| Feb-18 | 3 | 0 |
| Mar-18 | 3 | 0 |
| Apr-18 | 3 | 0 |
| May-18 | 3 | 0 |
| Jun-18 | 3 | 0 |
| Jul-18 | 3 | 0 |
| Aug-18 | 3 | 0 |
| Sep-18 | 3 | 0 |
| Oct-18 | 3 | 0 |
| Nov-18 | 3 | 0 |
| Dec-18 | 3 | 0 |

Click “EXPORT REPORT” button to save the report in either Excel or PDF format.

“EXPORT DATA” button allows the data used for the report to be exported into a csv file.

Available Reports: Usage Summary

DEXcenter Usage (By Date Range)

RUN REPORT TABLE OF CONTENT EXPORT DATA EXPORT REPORT

SHOWING PAGE 1 OF 1 GO TO PAGE: Go

Usage Summary

(January 1, 2018)

MBs Exchanged:

Files Exchanged:

Sessions:

Outside Companies:

ITI Sites:

Registered Users:

Export Data

Available result sets: Usage Period

Available Columns: Column Binding

Selected Columns:

Export format: CSV(*.csv)

Output encoding: UTF-8 Other (If blank, use the local encoding)

Separator: Comma (,)

Export column's data type Export column as locale neutral

Export data with Carriage Return

Section 3. Configuration

DEXcenter is initially configured automatically when it is installed. Once installed however, it may be necessary to modify or augment the automatic configuration. Some configuration functions can be performed from this web page, but most require direct database changes. This section describes how to perform these functions.

Configuration functions are accessed via the main menu “Configuration”. Submenus allow viewing and editing Datastores and Preferences.

Chapter 1. Datastores

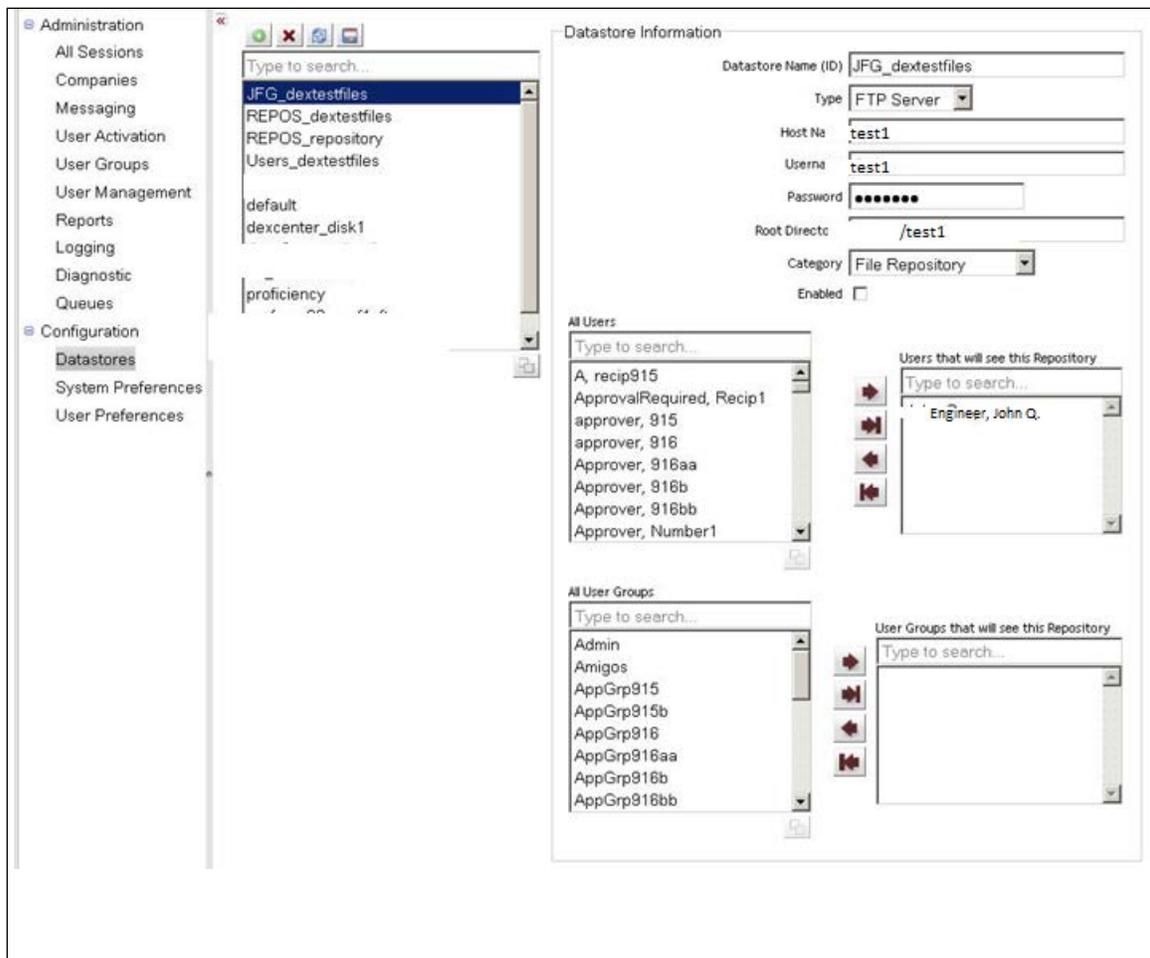
DEXcenter includes several types of Datastores:

Default Datastore – this is the main storage location where files on which DEXcenter operates are stored. The Datastore can be a local disk or an ftp or sftp server location.

Upload Directory – The upload directory is the location where files are saved temporarily on the DXS system when uploaded.

Repositories – Repositories are locations accessible from the DEXcenter server from which the User can select files. Repositories can be configured to allow access only to certain users.

All datastores can be of various types: a local disk directory, an FTP server site, and SFTP server site. Each requires appropriate configuration information.



Chapter 2. System and User Preferences

The System and User Preferences menus allow the administrator to view System and User parameters without directly accessing the database.

Modifications to the parameters can only be made directly in the database.

The screenshot shows the 'System Preferences' configuration page. On the left is a navigation tree with 'System Preferences' selected. The main content area has 'Add Parameter' and 'Save' buttons, and a 'default' tab. Below is a table of system parameters:

| Parameter ID | Enabled | Encrypted | Editable | Value | Type | Array | Default Value |
|-------------------------|-------------------------------------|--------------------------|-------------------------------------|-------|--------|-------|--------------------------|
| Administrator Email | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | dex.admin@yourcompany |
| APPROVAL | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Bool | Single | It | <input type="checkbox"/> |
| APPROVAL_DENIED_R | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | 0 |
| APPROVAL_POINT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | Se | BEFORE_PROCESS |
| APPROVAL_TIMEOUT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | 24 |
| APPROVAL_TIMEOUT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | 1 |
| User Authorities Roles | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Multi | Se | ROLE_ADMIN |
| Autobatch Directory | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | /var/dexcenter/autob |
| Batch Directory | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | /var/dexcenter/batch |
| Birt Home Directory | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | /webapp/dexcenter2/t |
| CLUSTER_CONNECTION | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | ClusteredConnectionFa |
| Customer Name | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | |
| DATABASE_VERSION | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Multi | Se | |
| DEBUG_WORKFLOW | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Multi | Se | |
| Default Usergroup | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | suppliers |
| Dexcenter License File | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | port@host |
| Dexcenter Logo | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | logo.jpg |
| Dexcenter URL | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Inte | Single | It | http://dexv6web.trans |
| ENABLE_PROFICIENCY | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Bool | Single | It | <input type="checkbox"/> |
| ETS_LAUNCH_URL | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | |
| External Authentication | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | Se | DEXcenter Authe |
| Install Date | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | 12-MAY-2010 11:17:53 |
| Internal Authentication | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | Se | DEXcenter Authe |
| Launcher Servlet URL | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single | It | http://localhost:8080/ |

Administration

- All Sessions
- Companies
- Messaging
- User Activation
- User Groups
- User Management
- Reports
- Logging
- Diagnostic
- Queues
- Configuration
 - Datastores
 - System Preferences
 - User Preferences**

« Add Parameter Save

All User

| Parameter ID | Enabled | Parameter Subtype | Encrypted | Editable | Value Type | Array Type | Default Value | Visible Mask | Display Order |
|--------------------------------|-------------------------------------|-------------------|-------------------------------------|-------------------------------------|------------|------------|-------------------------------------|-------------------------------------|---------------|
| Action Type Default | <input checked="" type="checkbox"/> | Sender | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single It | TRANSMIT | <input checked="" type="checkbox"/> | 0 |
| Approval Required | <input checked="" type="checkbox"/> | Recipi | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Bool | Single It | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 0 |
| Authentication | <input checked="" type="checkbox"/> | Gener | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single Se | DEXcenter Authe | <input checked="" type="checkbox"/> | 30010 |
| BCC Email Recipient | <input checked="" type="checkbox"/> | Recipi | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single It | | <input checked="" type="checkbox"/> | 20070 |
| BCC Email Sender | <input checked="" type="checkbox"/> | Sender | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single It | | <input checked="" type="checkbox"/> | 10020 |
| Buffer Size | <input checked="" type="checkbox"/> | Gener | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Inte | Single It | 4096 | <input checked="" type="checkbox"/> | 30030 |
| Buffers In Chunk | <input checked="" type="checkbox"/> | Gener | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Inte | Single It | 4000 | <input checked="" type="checkbox"/> | 30040 |
| CATEXP Multiple Model Grouping | <input checked="" type="checkbox"/> | Sender | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Bool | Single It | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 20010 |
| CC Email | <input checked="" type="checkbox"/> | Sender | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single It | | <input checked="" type="checkbox"/> | 10000 |
| CC Email Recipient | <input checked="" type="checkbox"/> | Recipi | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single It | | <input checked="" type="checkbox"/> | 20065 |
| CC Email Sender | <input checked="" type="checkbox"/> | Sender | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single It | | <input checked="" type="checkbox"/> | 10010 |
| CC Self | <input checked="" type="checkbox"/> | Sender | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Bool | Single It | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 10030 |
| Citizenship | <input checked="" type="checkbox"/> | Gener | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Text | Single Se | Afghanistan | <input checked="" type="checkbox"/> | 30050 |

Section 4. CAD Application Customization

- Chapter 1. Configuring Applications in DEXcenter
- Chapter 2. Enabling Applications and Recognized CAD Formats
- Chapter 3. Configuring CATIA V5
- Chapter 4. Configuring UG
- Chapter 5. Configuring Creo Parametric
- Chapter 6. CADIQ Qualify and Compare
- Chapter 7. Logic Task
- Chapter 8. CADfix As A Direct Translator
- Chapter 9. Configuring Solidworks
- Chapter 10. Configuring AutoCAD
- Chapter 11. Configuring IGESworks
- Chapter 12. Batch Input
- Chapter 13. SOA API Interface

Chapter 1. Configuring Applications in DEXcenter

Multiple levels of configuration are required to enable execution of Applications. These include:

- Database enablement and format recognition
- System access and execution
- Application licensing
- Workflow flavors

These areas are discussed in the chapters which follow.

Chapter 2. Enabling Applications and Recognized CAD Formats

DEXcenter is automatically configured for most possible CAD applications and application formats.

DEXcenter supports recent versions of the major CAD systems: Catia V4, Catia V5, NX, Creo Parametric, Solidworks, and Autocad.

Each application can support numerous file formats. This includes NATIVE, IGES, STEP, DXF, Parasolid, CATIA_EXP, JT, PROE_GRANITE, PROE_NEUTRAL. Supported formats vary by CAD system and by the actual translators which exist at a given installation. By default, the recognized file formats for an application are its NATIVE ones. For neutral standards, the application is defined as Generic and the neutral standard as a file format.

Application_File_formats table

To ensure users do not inadvertently try to create translations which are not possible with the DEXcenter configuration, the database table `application_file_formats` should be modified.

A row exists in the `application_file_formats` table for each valid combination of file extension, CAD system, CAD format, and datatype. If the combination in the row is supported in the DEXcenter installation, then the `ENABLED` column should be set to Y. If not, it should be set to N. Only those formats which have `ENABLED` set as Y are selectable in member profile preferences and on Create Session forms.

After making all changes in `application_file_formats` table, access the Help functions in the DEXcenter application as an Admin user. Choose the option to update the tables. This will synchronize other changes that are required.

SYSTEM.CFG

Enabling applications also requires modifying the `SYSTEM.CFG` and `Defaults.dat` files in each DEXcenter DTS where the application will be executed. The parameters in these files define how to execute the various applications. Each application has specific parameters as

defined below. These files are located in the ...\\dts\translate\master directory on each DTS. Note that multiple versions of a specific CAD application can be enabled simultaneously. Since most CAD applications can read native files created by older versions, usually the newest version enabled is configured to read and process all files. Older versions are typically only used when it is necessary supply specific versions of native files to partners.

Flavors

Finally, each application has unique “flavors” to control its execution. The Flavors control how each task is executed. DEXcenter is delivered with hundreds of pre-defined flavors representing “best practice” results. Adding and modifying flavors provide the ability to customize translations for different recipient needs.

Flavors are specified as part of each workflow. To use a different flavor, create a new flavor and upload a new workflow that utilizes the flavor.

Flavor files are specific to each application. The format and content of application specific flavors are defined in the Application specific sections below.

Chapter 3. Configuring CATIA V5 within DEXcenter

Several steps must be completed to correctly configure DEXcenter for CATIA V5 Support. This chapter discusses some of the changes made to the configuration files and also how to make additional necessary changes for use of DEXcenter with CATIA V5.

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the Catia application. There are general parameters which apply to all Catia versions and there are specific Catia version parameters which must be defined. The comments in the SYSTEM.cfg file identify the different parameters.

CATIA V5 Licensing

To enable Catia V5 execution within DEXcenter, a valid Catia V5 license file must be generated and copied to */DexRoot/translate/master/catia*. Note that sometimes Catia package licenses which include numerous modules are used while at other times individual licenses for translators or other features may need to be specified. Each unique Catia license required must be copied to the location above.

Follow this procedure to enable Catia V5 licensing:

1. Login to the Windows translation server as the DEXcenter owner (usually "dex").
2. Execute Catia V5 interactively and select a valid Catia V5 license configuration.
3. In the DEXcenter owner profiles area, there should now be a CATSettings directory containing the file "Licensing.CATSettings". Copy this file to */DexRoot/translate/master/catia/Licensing_"version5".CATsettings*.
The location is typically *C:\Documents and Settings\user\Application Data\DassaultSystemes\CATSettings*.

Note:

If the Catia license information changes, this file must be updated. An invalid license file will cause the Catia V5 translation to hang indefinitely until cancelled.

To generate a new License.CATSettings file, you can delete (or move) the existing one from the user's "CATSettings" directory and run Catia5 again. This will force the license configuration window to pop up.

Catia V5 Flavors

Catia V5 stores its settings in binary files. To add Catia V5 flavors to DEXcenter, first access Catia V5 interactively and modify the options desired. Catia saves these in a .CATSettings file in the user's default directory.

Within DEXcenter, the flavors are controlled via an "ini" flavor file (.flv) which points to the various .CATSettings files.

Testing has determined that .CATSettings files are platform independent, therefore no differentiation is made between platforms for CATSettings files. Only CATIA V5 versions (V5R10, V5R11, etc) are differentiated.

When performing a V4 to V5 migration interactively within CATIA, the Options page allows the user to control many different settings. Within the Options page there are 5 tabs. The settings on each tab is stored in a specific .CATSettings file. The tab names and their corresponding .CATSettings files are described in Catia V5 documentation.

Catia V5 Search Paths and Assembly Load Options

Catia V5 provides various assembly load options. DEXcenter is delivered with Catia enabled to search for assembly components in the same directory as the assembly file. This requires that the assembly (.CATProduct) file and all referenced part (.CATPart) files must be selected and uploaded at the same time.

To enable other options such as “As Saved” or specific “Search Directories”, the following operations must be performed:

Interactively execute Catia and save the desired .CATSettings options file.

Enable the .CATSettings file within DEXcenter as a flavor.

The DEXcenter translation servers for Catia V5 must have access to any referenced file systems exactly as referenced in the Catia V5 assembly.

Catia V5 Utility – Migration V4 To V5 Tool

DEXcenter includes support for the CATIA V5 MigrateV4ToV5 batch utility. The output of this functionality will be one or more .CATPart, .CATProduct, and/or .CATDrawing files and a log file.

This functionality is utilized by including the task CATIA_V5R'ver'_MIGRATE_V4_TO_V5

'ver' is the specific version 21, 22, etc.

The MigrateV4ToV5 task is not automatically inserted into any path workflows. It can be placed into a customized CATIA V4 to CATIA V5 path which may involve branching.

Chapter 4. Configuring NX within DEXcenter

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the NX application and license information. There are general parameters which apply to all NX versions and there are specific NX version parameters which must be defined. The comments in the SYSTEM.cfg file identify the different parameters.

NX Flavors

For DEXcenter NX IGES and DXF translations, the flavor files are the .def files created by NX. To create a specific set of options, interactively access NX and set the options into a .def file. Add the .def files into DEXcenter as flavors which are referenced by a path workflow.

For STEP translations, a .flv file must be created with two sections as follows:

```
[application_protocol]
step_ap=203

[def_file]
filename=step203ug.def
```

The first section defines the STEP AP. The second section defines the corresponding NX .def file. Specific NX options are set in the designated .def file.

NX Search Paths and Load Options

DEXcenter can use NX search paths. This allows NX to access cad files which reside in archived directories, without the user having to submit them.

This is enabled using NX functionality. To enable:

Set up UGI_SEARCH_DIRS in the NX .def files.

Enable the ugpc assembly check function to utilize the -a option in SYSTEM.CFG.<dtshost>.

Ensure each NX DTS has access to the search directories.

NX provides various assembly load options. DEXcenter is delivered with NX enabled to search for assembly components in the same directory as the assembly file.

To enable other options such as “As Saved” or specific “Search Directories”, the following operations must be performed:

Modify the default NX flavor or copy it to create a new one. Include the appropriate NX .def file parameters in the flavor.

The DEXcenter translation servers for NX must have access to any referenced file systems exactly as referenced in the NX assembly.

Chapter 5. Configuring Creo Parametric within DEXcenter

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the Creo Parametric application and license information. There are general parameters which apply to all Creo Parametric versions and there are specific Creo Parametric version parameters which must be defined. The comments in the SYSTEM.cfg file identify the different parameters.

Creo Parametric Flavors

Most Creo Parametric variables are controlled by defining a valid config.pro file as with normal interactive usage. Refer to Creo Parametric documentation to determine the config.pro contents.

A Creo Parametric flavor file must have the extension .flv and contain sections which define snippets of a config.pro file. An example of a STEP snippet is below.

```
#_____start STEP _____#

##### start config.pro
export_3d_force_default_naming yes
intf_out_assign_names no_name
step_appearance_layers_groups no
step_export_ap214_asm_def_mode single_file
step_export_dwg_views no
step_export_format ap203_is
intf3d_out_default_option solid
intf3d_out_datums_by_default no
##### end config.pro

#_____ end STEP _____#
```

Creo Parametric search paths

DEXcenter can use Creo Parametric search paths. This allows Creo Parametric to access CAD files which reside in archived directories, without the user having to submit them.

For example... if an entire assembly exists in an archived directory or directories, then the user will only need to submit the top level assembly to DEXcenter. Creo Parametric will load the necessary child files from the search path directories.

If any required files cannot be found in either the session or the search path directories, then the user is notified to submit the missing files.

If a Creo Parametric part is found in the search path, but was also submitted in the session, then the submitted part will override the part found in the search path.

If a Creo Parametric subassembly is found in the search path and was also submitted in the

session, then the submitted subassembly will be treated as a top level item and Creo Parametric will use the subassembly found in the search path.

Creo Parametric search paths support all of the different Creo Parametric reference types supported by DEXcenter.

Creo Parametric search paths are configurable separately for each Creo Parametric version.

To configure search paths, do the following:

1) Create the search path file. This is simply a text file containing the fully qualified directory names from which Creo Parametric should load models. Enter one directory per line. Creo Parametric does not recursively search through directories, so all subdirectories must be listed separately.

The default name for this file in Creo Parametric terminology is "search.pro" but it can be named differently if desired.

2) Store the search path file in <dexroot>/translate/master/proe on the Creo Parametric DTS computer. Note the directories listed must be accessible from the DTS.

3) On the DEXcenter server, uncomment the SYSTEM.CFG.<dtshost> parameter called "PRO_version_SEARCHPATH_FILE". Modify it to specify the name and location of the searchpath file as accessible by the Pro/E DTS.

Pro/Intralink Revision Parameter Included in Neutral File Names

Creo Parametric files can have various parameters defined within them, both user-defined as well as system parameters. One parameter in particular, "PROI_REVISION", is a system parameter which cannot typically be created or modified by a Creo Parametric user. This parameter is set in the file by Pro/INTRALINK.

PROI_REVISION functionality in DEXcenter

DEXcenter supports the use of this parameter. If this functionality is turned on, and if a Creo Parametric file has PROI_REVISION defined within it, then the exported DXF/IGES/STEP filename will have the PROI_REVISION value appended to it.

To activate this functionality, set the following SYSTEM.CFG.<dtshost> variable:

```
PRO_WILDFIRE_APPEND_PROI_REVISION=1
```

This variable is set to 0 (off) by default in the template files. This functionality is supported for Wildfire and later versions. It does NOT support 2000i2 or 2001, due to Creo Parametric limitations.

NOTES

- It is possible to force Creo Parametric to let you create this parameter in any Creo Parametric file. To do this, you must have the following option set in your config.pro:
allow_create_pdm_param yes

- If you use shrinkwrap for a Creo Parametric file which has PROI_REVISION defined, the resultant shrinkwrap part will NOT have the PROI_REVISION parameter. However, DEXcenter supports this by extracting the PROI_REVISION parameter before the shrinkwrap operation. The revision value is then appended to the neutral file exported from the shrinkwrapped part.

Extracting Parameters from Creo Native models

DEXcenter has a task which can extract parameters from a Creo model and put them into the DEXcenter database for use in later tasks. This task is not included automatically in any path workflows but can be added as needed.

Chapter 6. Configuring CADIQ Within DEXcenter

Support is included for CADIQ to perform validation, comparison, ECO documentation, and Producibility analysis of CAD files in many different neutral and native formats.

CADIQ Tasks are CAD system and version specific and are automatically created during installation when CADIQ is identified for the specific CAD system version. CADIQ tasks are also created when CADIQ updates are made.

DEXcenter is delivered with various workflow combinations of source and target CAD system versions for comparison but not all possible combinations. Additional workflow combinations can be provided upon request.

For CADIQ to be executed within a workflow, two conditions must be met:

- CADIQ tasks must be configured within the Path workflow being utilized.
- The “Model Quality” box in the Recipient Profile or Create Session Preferences sections must be checked. Even if CADIQ is in the Translation Path, it will be skipped unless the “Model Quality” box is checked.

CADIQ Quality results are always available to the Sender. The results are also available to the Recipient if the “Include Quality Files” box is checked in the recipient’s profile or in the Create Session Preference form. Specific Quality results file are available based upon which “Include Quality ‘format’ Files” boxes are checked in the Sender Profile section.

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the CADIQ application and license information. There are specific CADIQ parameters for different CAD systems and versions. There are general parameters which apply to all CADIQ CAD applications and versions. The comments in the SYSTEM.CFG file identify the different parameters.

Flavors

CADIQ execution is controlled by CADIQ configuration files (.iqj, .cfg) which may be different for different path workflows. The file <dextroot>/dts/procdefs/flavoring/cadiq/cadiq.flavor file identifies which CADIQ configuration files to use in each workflow.

CADIQ Output Files

The CADIQ task creates several output files as follows:

“model”.iqjz file – graphic file of results for “model” which is viewed in the CADIQ viewer application.

“model” report.txt file – text file of analysis results for “model”

“model”_report.pdf file – PDF file of results for “model”

results.ini – ini formatted file of key analysis results which can be used by DEXcenter logic task to control execution

License requirements

CADIQ has many functions some of which require specific licenses. Licenses for the specific CADIQ functions as well as CAD licenses for native model analysis must be available.

Chapter 7. Logic Task

DEXcenter provides the ability to include logical decisions within a path.

This functionality is implemented using a "logic" task. This task executes on the DEXcenter DXS server. Based on some configurable criteria, the logic task will cause DEXcenter to execute a specific set of tasks identified by their sequence numbers, or it may also cause DEXcenter to stop processing all remaining tasks in that path workflow.

The logic intelligence is contained within the task's flavor file. The flavor file is a snippet of python code which imports key parameters defined in an ini format from a previously executed DEXcenter task. Task execution decisions can be made based upon values of the key parameters.

For the case of logic based on CADIQ, a "<cadsys>_CADIQ.ini" file is created containing information from the CADIQ watch file (.iqw). There are specific key values defined. Any such key value can be used in the logic flavor. This implementation uses key values defining QUALITY, SOLIDS, SURFACES, and SHELLS. Based upon the values of the parameters, DEXcenter executes a specified list of tasks identified by their task sequence numbers. Any valid task number or numbers may be specified. For example, a list of translation tasks and/or another logic task may be specified by number. To stop processing, an empty set ([]) should be specified.

The CADfix task creates CADFIX.ini respectively which include information pertinent to the logic task.

Care must be taken when configuring logic within a path. The decisions are made based on task numbers, so whenever a task is added or removed to a path, be sure to change the appropriate logic flavor file(s) accordingly.

Note that the CADFIX_TRANSLATE task should be used in any paths where logic choices are being made. This forces the CADfix task to always be executed instead of conditionally being executed based upon the value of the MODEL HEALING option. Otherwise the task numbers change based upon the MODEL HEALING option which will make the logic flavor parameters invalid.

A sample logic flavor template is provided at <deroot>/procdefs/flavoring/logic.

Chapter 8. CADfix As A Direct Translator

The normal CADfix task is automatically created and configured into appropriate standard paths. This CADfix task is executed or skipped based upon the Model Healing parameter in the member Profile Preferences or as overridden during session creation.

When CADfix is to be used as a direct translator, CADfix should always be executed without regard for the Model Healing parameter. This is allowed by using a different task name, CADFIX_TRANSLATE, in applicable paths. This task is created automatically when CADfix is enabled in the installation. It must be manually inserted into the appropriate paths however.

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the CADfix application and license information. The comments in the SYSTEM.CFG file identify the different parameters.

CADfix Flavors

Both the CADfix and CADFIX_TRANSLATE tasks use standard CADfix wizards as flavor files. When using CADFIX_TRANSLATE to operate as a direct translator, the appropriate wizard must be referenced as a flavor to generate the desired output file.

CADfix flavor files are CADfix wizards (.cwc extension). To create a new flavor, simply create a wizard file in CADfix and add to DEXcenter. To ensure complete batch execution, the following parameters within the CADfix wizard should be enabled:

| | |
|---|------------|
| continueOnError | [0, 1] : 1 |
| repair,buildOption [SOLIDS, FACES, SOLIDS+FACES, UNKNOWN] : | UNKNOWN |
| export,always | [0, 1] : 1 |

Chapter 9. Configuring Solidworks

If Solidworks is enabled the Application Server (JBoss, Wildfly) service must be enabled to allow “interaction with desktop”. If it is not, Solidworks translations will fail and not provide useful information.

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the Solidworks application and license information. There are specific Solidworks parameters for different versions. The comments in the SYSTEM.CFG file identify the different parameters.

Solidworks Flavors

Solidworks flavoring is controlled by setting various user preference values in the form “swApp.SetUserPreferenceToggle #,'value” or “swApp.SetUserPreferenceIntegerValue #,'value” where # is the corresponding number of the preference parameter as defined in the Solidworks swconst.h file. Value is a value to which the preference parameter can be set.

Chapter 10. Configuring AutoCAD

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the AutoCAD application and license information. There are specific Autocad parameters for different versions. The comments in the SYSTEM.CFG file identify the different parameters.

AutoCad Flavors

For DEXcenter AutoCAD translations, the flavor files are the .opt files created by AutoCAD. To create a specific set of options, interactively access AutoCAD and set the options into a .opt file. Add the .opt files into DEXcenter as flavors.

Chapter 11. Configuring IGESworks

Configuration

The SYSTEM.CFG.<dtshost> file must be modified to include the location of the IGESworks application and license information. The comments in the SYSTEM.CFG file identify the different parameters.

IGESworks Flavors

IGESworks flavors are IGESworks scripts. The script should begin operating on an already opened IGES file and will need to save the file with the same name when complete.

Chapter 12. Batch Input

DEXcenter provides a batch input capability to allow easy integration with other applications which may want to send data to DEXcenter for translation or transmission. For instance, a PLM system can push data to DEXcenter by generating the required batch input files.

Two input files are required:

- A uniquely named .ini file which describes the session.
- The actual data file(s) themselves. These can be individual files or a tar or zip file.

To execute a batch operation:

Place the .ini and data files into the <DexRoot>/batch_inputs directory.

To execute immediately, as the dex owner, enter the command
<DexRoot>/utilities/scripts/BatchIniClient

The files in the tar/zip files will be extracted into a session within DEXcenter and sent to the recipient specified using the recipients profile settings unless otherwise indicated in the batchcron.ini file.

The batch input queue is enabled automatically during installation. To change the frequency of execution, edit the crontab.

Note:

Once the batchcron.exe file is run, the .ini file and tar/zip files are removed from the batch_inputs directory.

Example of a batchcron.ini file

```
[CREATE_SESSION]
SUBMIT=Input          [ Input | Transmit_Only | Translate ] Default: Translate
TITLE=Session Title  Default: DEXcenter Batch Input from {ORIGINATOR}
EMAILTEXT=           Default: msg: bcron_batch_job_ready
CCEMAIL=
*SENDER=jxs          [DEXcenter user ID]
RECIPIENT=           [DEXcenter user ID(s) comma separated] Default: SENDER
SELECTSELF=         [ YES | NO | NULL ] Default: NULL
TARGET_CAD_SYSTEM=AUTOMATIC Default: AUTOMATIC
TARGET_CAD_FORMAT=AUTOMATIC Default: AUTOMATIC
PATH=PROFILE         [ PROFILE | AUTOMATIC ] Default: PROFILE
HEALING=NO           [ YES | NO | PROFILE ] Default: PROFILE
MODEL_QUALITY=NO     [ YES | NO | PROFILE ] Default: PROFILE
MODELQUALITY_SOURCE=NA [ YES | NO | NA ] Default: NA
MODELQUALITY_TARGET=NA [ YES | NO | NA ] Default: NA
JT_EXPORT=NO        [ YES | NO | PROFILE ] Default: PROFILE
INTERMEDIATE=YES    [ YES | NO | PROFILE ] Default: PROFILE
PROCZIP=NO          [ YES | NO | NULL ] Default: NULL
PROCOORD=NO         [ YES | NO | NULL ] Default: NULL
SKIPMISSING=NO      [ YES | NO | NULL ] Default: NULL

[FILE_1]
*FILENAME=batchcron.zip or batchcron.tar
SOURCE_CAD_SYSTEM=AUTODETECT Default: AUTODETECT
SOURCE_CAD_FORMAT=AUTODETECT Default: AUTODETECT
SOURCE_DATA_TYPE=PART [PART | DRAW | ASSEMBLY] Default: PART

[FILE_2]
*FILENAME=batchcron.zip or batchcron.tar
```

etc. repeat for all files

* = required parameter

[] = specific allowable values. If omitted, any text is allowed.

Default = value used if not specifically defined in .ini file

Automated Batch Input

DEXcenter provides a simplified method to submit files for automatic translation. Models to be translated will be placed into an input directory whose name matches the name of an existing DEXcenter user. DEXcenter will automatically create the corresponding batchcron .ini and zip files and place them into the batch input directory. Operations will be based entirely upon the named user's default profile settings.

This simplified method is valid for the following conditions:

A DEXcenter userid must exactly match a corresponding input directory.

The recipient is the sender.

The sender / recipient profile preferences are used for the processing.

All files placed into the input folder will be incorporated into a single session when the batchcron executes. If assembly components, DEXcenter will automatically group them into unique assemblies. If multiple parts or assemblies are submitted, they will become unique subsessions.

For example, to configure DEXcenter to correspond to particular CAD system versions and projects, the following configuration may be used:

To convert to V5 for XX146 Project:

```
$BASE/in/Catia_V5_XX146
```

To convert to V5 for YY400 Project:

```
$BASE/in/Catia_V5_YY400
```

To convert to V4 for XX146 Project:

```
$BASE/in/Catia_V4_XX146
```

To convert to V4 for YY400 Project:

```
$BASE/in/Catia_V4_YY400
```

To convert to UG for XX146 Project:

```
$BASE/in/UG_XX146
```

The input directories are easily configurable, so directories can be added, modified, or deleted as needed. Configuration is via the file `<dextroot>/config/automated_batch_input.cfg` containing the following entries in this format:

```
export NUMBER_DIRECTORIES=5  
export BASE=/tmp  
export IN_DIR1=$BASE/in/userid1
```

```
export IN_DIR2=$BASE/in/userid2
export IN_DIR3=$BASE/in/userid3
export IN_DIR4=$BASE/in/userid4
export IN_DIR5=$BASE/in/userid5
```

DEXcenter user profiles will be created with names corresponding to the pickup directories:

```
userid1
userid2
userid3
userid4
userid5
```

Each DEXcenter profile will specify the corresponding parameters for translation and transmission. This will include at least the following:

Target CAD system, the appropriate workflow path, translation tasks.

A function checks for the existence of files in each input directory.

For each file found, a separate DEXcenter batch input file (.ini) is created.

The batch input file and the CAD file are moved to the DEXcenter batch input directory.

The function operates as a cron job at a designated frequency if enabled.

For Catia V4 models, the correct Catia V4 environment will be determined from the project portion of the directory name.

Configuration

The directories to be monitored by the `automated_batch_input` function are configured in the file `<dexroot>/config/automated_batch_input.cfg`.

The file `<dexroot>/scripts/launch_abi.csh` must be edited to identify the correct DEXcenter port and to direct output to a corresponding log file.

Chapter 13. SOA API Interface

DEXcenter includes an SOA API interface capability which allows applications to programmatically Create Sessions, check the status of sessions, and retrieve results from sessions. This provides more control over executing DEXcenter than a simple batch capability.

The SOA API interface is described in a separate document.