cadence

Quick Start Guide
Getting started in your chamber

This document is a User Guide for all engineers and support staff who are working in the chamber environment.

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INTRODUCTION

This document is a user guide to the Cadence chamber environment to get you quickly up and running. More detailed information can be found in additional documents.

Conventions Used

Commands (prefixed by a single >) and output appear in a fixed-width font:

```
> ll
total 96
drwxrwxr-x   2 user   daemon    4096 Jan 24 10:41.
drwxr-xr-x  61 user   ccusers   8192 Mar 26 23:15 ..
-rwxr-xr-x   1 user   ccusers    517 Jan 24 10:44 rl
-rwxrwxr-x   1 user   ccusers    653 Jul 11 02:32 rxterm.csh
```

Commands or button labels within the text appear in bold font:

Use the **module load** command or click the **Submit** button.

Text within arrow brackets indicate when you enter information specific to your environment. For example, if you have been given access to a project called 'hdsdemo' then:

```
> cd /projects/<project_name>
```

Becomes:

```
> cd /projects/hdsdemo
```

File and directory names appear in an italicized font:

file_archive.tar.gz

/projects/<project_name>/xfer

Glossary of Terms

The following terms and abbreviations are commonly used:

Term	Definition
ETX	OpenText Exceed Turbo X – Provides desktop environment
AnyConnect	Software to set up authenticated, secure connection from your device to the chamber
IPsec VPN	Hardware and/or IPSec VPN tunnel from the chamber to the customer site (if configured for your environment)

GETTING CONNECTED

Step 1: Authenticate

If your company has set up an IPsec VPN tunnel from your site to the chamber, then you can skip this step and go straight to step 2.

The secure connection to your chamber is provided by the AnyConnect client.

Read the AnyConnect setup guide for how to download and install the client for Windows, Mac or Linux. Once installed, you can run the client and enter your login credentials.

AnyConnect Server: ra-vcad??.cadence.com
Login: <username>
Password: <password provided in welcome email 2 of 3>

Step 2: Start up a virtual desktop

The virtual desktop is provided by OpenText's Exceed TurboX (ETX) client. Navigate to the ETX URL to log in and start up a desktop.

ETX URL: https://<hostname_or_IP>.cadence.com/etx
Login: <username>
Password: <password provided in welcome email 3 of 3>

If you are connecting via IPsec VPN, then you may need to use the IP address instead of the primary utility server hostname in the ETX URL.

The first time you log in, you will be prompted to enter your name and email address and to install the ETX client. After that, click on the "Start KDE Desktop" play button to start up the virtual desktop.

See the full Exceed TurboX installation guide for more detailed instructions.

NAVIGATING THE ENVIRONMENT

Storage locations

Here is a summary of the different chamber storage mounts:

/projects/<project_name>	This is the main project storage area. It is backed up. You should create a work folder under this structure (/projects/<project_name>/work/<username>) for storing your project files.
/rscratch/<project_name>	This area is for simulation output, logfiles and any transitory data that can be regenerated from source. Files are not backed up.
/apps/hosted	Third party tools will be installed here
/process/hosted	PDKs will be installed here
/home	The home directories have a small quota and are only intended for configuration files. Do not upload large files here.
.snapshot/	Snapshot backups can be retrieved from this area, if you need to restore a deleted file for example
/grid/common/pkgs	A wide range of common and open-source utilities are pre-installed here, e.g., python, perl

Note that you may need to access the directory (e.g., 'cd' into it) for it to be mounted onto the server.

Data Transfer

You can use SFTP and SCP to transfer data into the chamber. The hostname is your primary utility server, and the service is running on port 222.

We recommend that you upload to: /process/hosted/xfer

Note that download is blocked to users by default, but this can be enabled for individual users.

See the SFTP Guide for more information.

Server Naming Conventions

Hostname	Purpose	Description
<chamber>ut01	Primary Utility Server	Also known as the login server. This server runs the ETX, SFTP and any other similar services. It is not suitable for running tools and tool license access is blocked from this server.
<chamber>lv01	Virtual Machine	These VMs are for running tools and any processes which consume significant server resources.
<chamber>lo01	Physical Machine	These physical servers are for running tools and any processes which consume significant server resources.
<chamber>vs01	Version Control Server	(optional) Version control software is run on this server
<chamber>pd01	Palladium	(Palladium Cloud only) Cadence palladium machines.

Chamber Information

Once you are logged in to the chamber, you have access to an internal chamber webpage that displays useful information about your chamber configuration and status. Start up this page by clicking on the **Chamber Info** button on the desktop toolbar.

From this page, you can get details on:

- Server loading
- Disk Space
- Available tool licenses

RUNNING THE TOOLS

Modules

We use 'modules' in the chamber to set up your $PATH, license and other environment variables automatically.

To get a list of available project modules:

```
module avail projects
```

To get a list of all modules:

```
module avail
```

To load a module:

```
module load <module>
```

You can find more information on modules from the **Chamber Info** web page.

Accessing Compute Resource

When you initially connect to the chamber, you will be logged in to a utility server. The utility servers are meant only to serve the desktop sessions of those logged into the chamber. Running EDA tools or other large programs on the utility server will degrade the performance of desktop sessions for all users.

The two main ways to find out information about the compute machines (compute farm) are:

1. Using the serverinfo command:
   a. Login to the Chamber
   b. Use the command serverinfo on the command line
2. Using the Cadence Collaboration Toolbar:
   a. Click on the "Chamber Info" button on the Cadence Collaboration Toolbar inside the chamber. (If the toolbar did not launch automatically when you logged in to the chamber, you can always issue the command "toolbar" to launch it manually)
   b. Click on the _Servers Info_ link to get information about the compute machines available in the chamber. Any machine with name other than ut01 should be a compute server which is available for you to run EDA tools on inside the chamber.

If any compute servers are available in the chamber, use the compute server drop down list and the Login button on the toolbar to telnet to them. (Or you can simply

telnet or ssh -X to any of them using your ETX/Linux login and password. We recommend telnet or ssh -X over rlogin because they will bring forward the DISPLAY environment information.).

Rapid Adoption Kits

Rapid Adoption Kits (RAKs) are small, stand-alone projects that can be downloaded from the Cadence Online Support site and are intended to quickly get a user up to date on a particular tool feature. There is a wide range of RAKs available and, in addition to their intended use, they are excellent for testing out the chamber environment.

Follow these steps to use a RAK:

1. Download the RAK from the support site:

    a. Log in to support.cadence.com (see the Support Guide for information on registering)

    b. Enter "Rapid Adoption Kit" into the search bar to see the available kits, or

    c. Raise a support case and we can suggest a kit to try based on your needs

2. Upload the RAK into the chamber – remember to save it to your project area and not your home directory

3. Log on to a compute server (see the section on "Accessing Compute Resource) on how to do this)

4. Untar the RAK into the project area

5. Read the PDF packages with the RAK

6. Set up your environment:

    a. Run "module avail" to see the available tool versions

    b. Run "module load <module>" to load the tool required for the RAK

7. Follow the instructions in the RAK

You might need to check that your chamber has the right licenses required to run the RAK. You can get this information from the Chamber Info web page. See the "Getting Help" section for details on how to access this page.

GETTING HELP

You can always find more information on your chamber's web page. Whenever you start a Session to connect to the chamber, a Cadence Collaboration Toolbar should pop up automatically. Simply click on the "**Chamber Info**" button and a browser will launch to display a page containing helpful information on a variety of topics related to your chamber.

For additional help, raise a support case on https://support.cadence.com. For information on registering for a support account and creating cases can be found in the Support Guide.