

PROTEXPRESS 1.0 DATA PORTAL

Local Installation Guide



Center for Biomedical Informatics
and Information Technology

This is a U.S. Government work.

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Chapter 1 Introduction

This *protExpress 1.0 Installation Guide* provides you with the instructions to install and configure a fresh protExpress 1.0 application and the grid service. The protExpress installation installs and configures an Apache Tomcat instance, the web application and the grid service, and creates a protExpress-specific schema on a pre-existing database on a pre-installed PostgreSQL 8.3.x database server. An upgrade of protExpress reinstalls the web application and grid service. If the grid service was not installed as part of installation, it can be installed during an upgrade.

Instructions are given in this document for both Linux and Windows operating systems.

NOTE




Published protExpress development documentation can be found on the protExpress page of the NCICB web site: <http://protexpress.nci.nih.gov/>

Overview of protExpress Installation

The process for installing protExpress includes the following tasks described in this document:

1. Downloading and installing required software
 2. Setting environment variables
 3. Downloading protExpress 1.0 distribution files
 4. Installing protExpress:
 - a. Command-Line Method
 - Editing `install.properties` file
 5. Upgrading protExpress
 - b. Command-Line Method
 - Editing `upgrade.properties` file
 6. Configuring JBoss servers and PostgreSQL 8.3.xserver to run as a service
 7. Post-Installation Tasks
 - a. Updating Help Desk info in DB using SQL
 - b. Using UPT to Add protExpress Users
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<p>Before You Proceed</p> 	<p>Once protExpress 1.0 has been installed, you should use the upgrade package for subsequent installs/upgrades of either the application or the grid service. Using the installer package again on the same database instance (specified in the properties file) will OVERWRITE existing data. Please exercise caution.</p> <p>You can use the installer package if you want to host multiple instances of the application and/or want to maintain different versions of the application independent of each other. In this scenario, please ensure there are no port number conflicts for Apache Tomcat and no overlap between the database properties exist.</p>
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Chapter 2 protExpress 1.0 Software and Technology Requirements

Tested Environment

The protExpress 1.0 installation has been tested on Linux Red Hat Enterprise Linux AS 4 64/32-bit (for AMD chipset) and the Windows XP/2003 environments. While the installation may work in other Linux and Windows environments, it has only been tested in these environments.

Required Software—Not Included in protExpress

Many of the servers and services that make up protExpress 1.0 are automatically installed as part of this installation. However, certain tools that you must manually install and configure are listed in Table 2-1 on page 6. The software name, version, description, and URL hyperlinks (for download) are indicated in the table.

Prior to the protExpress 1.0 installation, you must download and install the following tools and recommended versions in the order they are listed in Table 2-1 on page 6. Complete the directions for installing each, as directed on the corresponding website.

Required Software Name Version	Description
Java 2 Platform Standard Edition 5.0 Update 11 (J2SE 5.0) http://java.sun.com/products/archive/j2se/5.0_11/ Be sure to download the correct Java SDK for your operating environment. For example, for Linux AMD 64, you would download jdk-1_5_0_11-linux-amd64-rpm.bin. For Windows, you might download jdk-1_5_0_11-windows-i586-p.exe.	The J2SE Development Kit (JDK) supports creating J2SE applications.
Apache Ant, 1.7.0 https://gforge.nci.nih.gov/svnroot/lsd/trunk/tools/apache-ant-1.7.0-bin.zip	Apache Ant is a Java-based build tool.
PostgreSQL 8.3.x http://www.postgresql.org/download/ Be sure to download the appropriate pre-built binaries according to the targeted operating system.	PostgreSQL is an open-source database software application.

Table 2-1. Required Software

Important!	As you install each application, record the installation directory path, and the hostname of your PostgreSQL 8.3.x DB server, and the DB admin username/password. This will be required for installing UPT.
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Java SDK Installation

When you install the Java SDK, you will be prompted to select the installation directory. Record the path, as this directory will be used when you set the environment variables.

Apache Ant Installation

Unzip the Apache Ant distribution files using a command line unzip tool or a zip utility, such as WinZip.

After extracting the zip, you must set the environment variables, described in the following section, so that Ant is available in the system PATH.

Apache Ant Environment Variables

As you install each application, record the installation directory path, and the hostname of your PostgreSQL 8.3.x DB server, and the DB admin username/password. **This will be required for installing UPT.**

NOTE

The purpose of setting operating system environment variables is so that the Java SDK and Ant build tool are available to run from anywhere in the system.

Linux

To set the environmental variables in Linux, follow these steps:

NOTE

The JAVA_HOME, ANT_HOME and PATH environment variables are set in /etc/profile. You may need to create the variables, or modify them if they already exist.

Step	Action
1	<p>As the root user, enter the following in the /etc/profile file. A PATH variable should already be created in this file, so be sure to define the JAVA_HOME and ANT_HOME export before the PATH export. Replace <some_path> with the correct path fragment for Java and Ant installations.</p> <pre>export JAVA_HOME=<some_path>/jdk1.5.0_11 export ANT_HOME=<some_path>/apache-ant-1.7.0 export PATH=\$JAVA_HOME/bin:\$ANT_HOME/bin:\$PATH</pre>
2	Log out and log back in so that the system recognizes your changes.

Verifying the Environment Variables in Linux


To verify that environment variables have been set correctly, follow these steps:

Step	Action
1	<p>From the command line, enter:</p> <pre>echo \$JAVA_HOME echo \$ANT_HOME</pre> <p>Both of these commands should return the location where you installed these tools.</p>

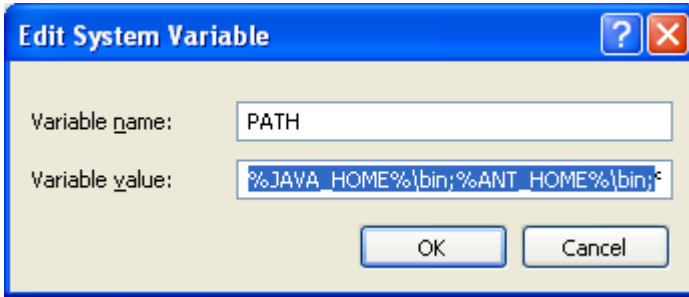
Step	Action
2	To verify your Java SDK installation, enter <i>java -version</i> from a command prompt. You should see <code>java version "1.5.0_11"</code> .
3	To verify your Ant installation, enter: <i>ant -version</i> from a command prompt. You should see: <code>Apache Ant version 1.7.0 compiled on December 13 2006.</code>

Windows

To set the environmental variables in Windows, follow these steps:

NOTE 	<p>The <code>JAVA_HOME</code>, <code>ANT_HOME</code> and <code>PATH</code> environment variables are set in the Systems Properties.</p>
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Step	Action
1	In Windows, select Control Panel , then select the Systems application. In the Systems window, select the Advanced tab.
2	On the Advanced tab, click the Environment Variables button. To add a new system variable, select the New button. a. In the Variable <u>n</u>ame text box, enter <code>JAVA_HOME</code> . b. In the Variable <u>v</u>alue text box, enter the location of your Java installation.
3	Click the New button again. a. In the Variable <u>n</u>ame text box, enter <code>ANT_HOME</code> . b. In the Variable <u>v</u>alue text box, enter the location of your Ant installation.

Step	Action
4	<p>Select the PATH system environment variable, and select the Edit button. This opens the Edit System Variable dialog box, displayed here as an example.</p> 
5	<p>In the Variable value text box, prepend the following text in front of the text that already exists in the Variable Value field.</p> <pre>%JAVA_HOME%\bin;%ANT_HOME%\bin;</pre> <p>Click OK.</p>

Verifying the Environment Variables in Windows

To verify the environment variables have been set correctly, follow these steps:

Step	Action
1	<p>From the command line, enter:</p> <pre>echo %JAVA_HOME% echo %ANT_HOME%</pre> <p>Both of these commands should return the location where you installed these tools.</p>
2	<p>To verify your Java SDK installation, enter java -version from a command prompt. You should see <code>java version "1.5.0_11"</code>.</p>
3	<p>To verify your Ant installation, enter ant -version from a command prompt. You should see: <code>Apache Ant version 1.7.0 compiled on December 13 2006</code>.</p>

NOTES




Environment variables for protExpress and, optionally, UPT are modified and set in those sections of this document:

- Installing a New protExpress 1.0, and
- Downloading and Installing UPT (Optional)

Chapter 3 PostgreSQL 8.3.x Installation and Configuration

A PostgreSQL 8.3.x server must be downloaded, installed and running in order for the protExpress installation to work successfully.

To download and install the appropriate PostgreSQL 8.3.x binary, follow the steps outlined on the PostgreSQL 8.3.x website: <http://www.postgresql.org/download/>

TIPS 	<ul style="list-style-type: none">• Record the PostgreSQL 8.3.x root username/password chosen during the PostgreSQL 8.3.x installation process. This will be needed when installing UPT (<code>database.system.user</code> and <code>database.system.password</code>).• Note the PostgreSQL 8.3.x port chosen during the PostgreSQL 8.3.x installation process, as you will need to use this as your <code>database.port</code> later in both the protExpress and UPT installation processes.
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Once installed, you must configure the database for protExpress.

Database configuration

Once the database server is installed, a database should be created along with a user who has full access on the database to create object (tables etc).

Step	Action
1	Connect to the database instance either through the command line or via the PostgreSQL client.
2	Create a new database: create database [database_name]; where, database_name is the name of the database. Make a note of this name as it will be used later in the installation.

Step	Action
2	<p>Create a new user:</p> <p style="text-align: center;">create user [db_username] with encrypted password '[db_pwd]';</p> <p>where,</p> <p>db_username is the name of the database user,</p> <p>db_pwd is the password for the newly created user.</p> <p>Make a note of the above values as they will be used later in the installation.</p>
2	<p>Set the newly created user as the owner of the database.</p> <p style="text-align: center;">alter database [database_name] owner to [db_username];</p> <p>where,</p> <p>database_name is the name of the database, and</p> <p>db_username is the name of the database user,</p>

Chapter 4 Working with Properties Files

About Properties

An important component of command-line installation of either protExpress or UPT, is configuring properties files.

Prior to initiating a command-line installation, property variables must be modified. Note the following points about changing or entering variables.

Paths in Properties Files

NOTE



The paths in the `.properties` files should use *forward* slashes. For example, you would use `application.base.path.windows=C:/apps/protExpress`, **not** `application.base.path.windows=C:\apps\protExpress-app`. If you use backslashes, you will experience undesirable results.

Spaces in Path Property Values

NOTE



You should not specify paths with spaces included as property values. In Windows, note that the `C:\Documents and Settings\<username>` path contains spaces and should not be used, or anything similar. If you are using Windows, use a path such as `C:/apps/protExpress`. Spaces are fine for property values which do not represent a path.

More About Property Values

NOTES



- In each `*.properties` file,, any property value marked with uppercase `REPLACE_*` must be manually updated with the appropriate value.
- In each `*.properties` file, any property value marked with lowercase `replace_*` may be optionally updated with the appropriate value.


Chapter 5 Downloading and Installing UPT (Optional)

If you **do not already** have a User Provisioning Tool (UPT) installed, and you wish to manage user accounts for your protExpress application, you **must** install UPT.

Overview of UPT

- UPT is used to provision users in the protExpress application. Each application installs with its own Common Security Module (CSM) schema that has sample/default users and a role/permissions structure.
- To add additional users you must provision the protExpress application in the UPT. Then you can assign users to protExpress.
- UPT 3.2.0 installation file and User's Guide can be downloaded from the following URL: https://gforge.nci.nih.gov/frs/?group_id=327

Server Components Installed by UPT 3.2.0 installer	<ul style="list-style-type: none">• The following components are installed and configured as part of 3.2.0 installation. You do not need to do anything further to download or install these components.<ul style="list-style-type: none">◦ JBoss 4.0.x – Hosts the UPT application.
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NOTE 	<ul style="list-style-type: none">• Verify that default port values defined in <code>upt-install.properties</code> files are not in use on your system by running <code>netstat -a</code> from the command line.• The installer run pre-installation checks and fail the installation if ports the installer must use are in use. If the ports are in use prior to installation, you will need to stop any processes that are running.• The UPT installer installs an instance of JBoss 4.0.4.
--	--

<p>PRE-REQUISITES</p>	<ul style="list-style-type: none"> • UPT requires a MySql 5.0.x database to be pre-installed. MySql is an open-source database software application. • MySql 5.0.x can be downloaded from the URL: http://downloads.mysql.com/archives.php?p=mysql-5.0 • It is recommended to install version MySql 5.0.27 or above. • IMPORTANT- As MySql is installed, record the following values: <ul style="list-style-type: none"> ○ Installation Path ○ DB Server Hostname ○ DB Server Port ○ DB Admin User name ○ DB Admin User name and password. • It is recommended to create the following, and record the values for later use: <ul style="list-style-type: none"> ○ Database Name – Name for the UPT database in MySql. ○ Database user name – The username to access and create database objects in the UPT database. ○ Database user password – Password for the database user identified in the previous step.
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To download and install the **UPT 3.2** files, follow these steps:


Step	Action
1.	<p>Download the UPT 3.2.0 Installation Zip File (upt_install_3.2.0.zip) from the following location:</p> <p>Download URL: https://gforge.nci.nih.gov/frs/?group_id=327</p> <p>IMPORTANT: Remember the download location as you will be using this file to run the installation in the steps that follow.</p>
2.	<p>From the directory where you downloaded the upt_install_3.2.0.zip file, unzip the files, using one of these two methods:</p> <p>a. Open a command prompt and use it to extract this file to a temporary location.</p> <p>a. For example, you may enter a command as below. You must have a ZIP tool installed.</p> <pre>unzip -q upt_install_3.2.0.zip</pre> <p>b. Use WinZip or a similar utility to unzip the files.</p> <p>IMPORTANT: Remember the location where the files were extracted. This location will be referred to as the <UPT_INSTALLER_DIRECTORY>.</p>
3.	<ul style="list-style-type: none"> • Edit the properties file: <UPT_INSTALLER_DIRECTORY>/install.properties. • Update the values in the properties file, as appropriate. At a minimum, you will need to modify the values in the following table:

Step	Action	
4.	Environment Variable	Description
	application.base.path	<p>The location where you want to install UPT.</p> <p><i>Example:</i> In Windows, it could be C:/apps/upt. Linux users can use \${user.home}/apps/upt or any other folder to which you have write permissions.</p> <p>Important: This directory must be different than <UPT_INSTALLER_DIRECTORY> or the installation will fail.</p>
	authentication.type	<p>The scheme used to login to UPT. Can be either of the following values:</p> <ul style="list-style-type: none"> • ldap • db
	database.server	This value <u>must</u> correspond to the domain name of machine that hosts the database server. You may need to consult your system administrator for this information.
	database.port	This value <u>must</u> correspond to the port for the database server. 3306 is the default port, but check with your database administrator to be certain.
	database.name	The name for the UPT database.
	database.user	The name for the database user who can access and create objects in the UPT database.
	database.password	Password for the above mentioned user.
4.	ldap.url ldap.basedn	<p>LDAP related values. You may need to check with your sys admin for these.</p> <p>Required if the authentication.type=ldap, else leave as blank.</p>
	<p>Note: You shouldn't need to modify the other defaults values as we have chosen unique ports to reduce the risk of other applications using the same values. However, be sure to check the install.properties to verify that the ports in this file are not being used by other applications, otherwise you will experience problems.</p>	
5.	<p>From the command line, navigate to <UPT_INSTALLER_DIRECTORY>, and type ant. This runs the installation.</p>	

Step	Action
6.	To verify the UPT installation, go to: <a href="http://<jboss.server.hostname>.<jboss.server.port>/upt">http://<jboss.server.hostname>.<jboss.server.port>/upt Refer to the <code>install.properties</code> for the correct values
7.	After successfully installing UPT, make a backup of <code><UPT_INSTALLER_DIRECTORY>/install.properties</code> in another directory for future reference.
8.	IMPORTANT: The default installation of UPT does not include the PostgreSQL 8.3.x JDBC Jar File. This will have to be manually copied over to the Jboss directory. Details are below: Filename: postgresql-8.3-603.jdbc3.jar Download URL: https://gforge.nci.nih.gov/frs/?group_id=327 Copy To folder: {application.base.path}/jboss-4.0.4.GA/server/default/lib
9.	Stop the JBoss server. Restart the JBoss server.

Chapter 6 Installing protExpress 1.0 Application and Services

To newly install the protExpress 1.0 application and services, follow the steps in this section:

BEFORE YOU BEGIN 	<ul style="list-style-type: none">• Important: There must already be a pre-existing PostgreSQL 8.3.x DB and connection username/password for protExpress to install into; protExpress does not create its own DB.
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Downloading protExpress 1.0 files

To download the protExpress 1.0 files, follow this step:


Step	Action
1	<p>Download the protExpress 1.0 Installation Zip File (protExpress_Install_1.0..zip) from the following location:</p> <p>Download URL: https://gforge.nci.nih.gov/frs/?group_id=327</p> <p>IMPORTANT: Remember the download location as you will be using this file to run the installation in the steps that follow.</p>

Server Components in protExpress 1.0

These server components are installed and configured as part of the protExpress 1.0 installation. You do not need to do anything further to download or install these components.

- Apache Tomcat 5.5.20 (hosts both the protExpress application and grid service)
-

Installing a New protExpress 1.0 Instance

<p>BEFORE YOU BEGIN</p> 	<ul style="list-style-type: none"> • Important: The installation process deletes any existing data in the database. • If you do not want the re-initialize the data in the database, used the protExpress 1.0 Upgrade Package.
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To install a new instance of protExpress 1.0 using the command-line, follow these steps:

Step	Action						
1.	<p>From the directory where you downloaded the protExpress_Install_1.0.zip file, unzip the files, using one of these two methods:</p> <p>b. Open a command prompt and use it to extract this file to a temporary location.</p> <p>a. For example, you may enter a command as below. You must have a ZIP tool installed.</p> <pre>unzip -q protExpress_Install_1.0.zip</pre> <p>b. Use WinZip or a similar utility to unzip the files.</p> <p>IMPORTANT: Remember the location where the files were extracted. This location will be referred to as the <INSTALLER_DIRECTORY>.</p>						
2.	<ul style="list-style-type: none"> • Edit the properties file: < INSTALLER_DIRECTORY>/install.properties. • Update the values in the properties file, as appropriate. At a minimum, you will need to modify the below values: <table border="1" data-bbox="430 1276 1404 1791"> <tr> <td data-bbox="430 1276 755 1581">application.install.path</td><td data-bbox="755 1276 1404 1581"> <p>The location where you want to install protExpress.</p> <p><i>Example:</i> In Windows, it could be C:/apps/protExpress. Linux users can use \${user.home}/apps/protExpress or any other folder to which you have write permissions.</p> <p>Important: This directory must be different than < INSTALLER_DIRECTORY> or the installation will fail.</p> </td></tr> <tr> <td data-bbox="430 1581 755 1665">application.build.node</td><td data-bbox="755 1581 1404 1665"> <p>A text string that denotes the location of the research center/lab/facility that is installing protExpress</p> </td></tr> <tr> <td data-bbox="430 1665 755 1791">tomcat.host.name</td><td data-bbox="755 1665 1404 1791"> <p>This value <u>must</u> correspond to the domain name of machine that hosts the application server. You may need to consult your system administrator for this information.</p> </td></tr> </table>	application.install.path	<p>The location where you want to install protExpress.</p> <p><i>Example:</i> In Windows, it could be C:/apps/protExpress. Linux users can use \${user.home}/apps/protExpress or any other folder to which you have write permissions.</p> <p>Important: This directory must be different than < INSTALLER_DIRECTORY> or the installation will fail.</p>	application.build.node	<p>A text string that denotes the location of the research center/lab/facility that is installing protExpress</p>	tomcat.host.name	<p>This value <u>must</u> correspond to the domain name of machine that hosts the application server. You may need to consult your system administrator for this information.</p>
application.install.path	<p>The location where you want to install protExpress.</p> <p><i>Example:</i> In Windows, it could be C:/apps/protExpress. Linux users can use \${user.home}/apps/protExpress or any other folder to which you have write permissions.</p> <p>Important: This directory must be different than < INSTALLER_DIRECTORY> or the installation will fail.</p>						
application.build.node	<p>A text string that denotes the location of the research center/lab/facility that is installing protExpress</p>						
tomcat.host.name	<p>This value <u>must</u> correspond to the domain name of machine that hosts the application server. You may need to consult your system administrator for this information.</p>						

Step	Action	
	database.server	This value <u>must</u> correspond to the domain name of machine that hosts the PostgreSQL 8.3.x database server. You may need to consult your system administrator for this information.
	database.port	This value <u>must</u> correspond to the port for the PostgreSQL 8.3.x database server. 5432 is the default port, but check with your database administrator to be certain.
	database.name	The name of the database. Example: protExpress
	database.user	The name for the database user who can access and create objects in the UPT database.
	database.password	Password for the above mentioned user.
	mail.smtp.host	SMTP Mail server for sending outgoing emails.
	mail.smtp.port	Outgoing email server port number.
	ldap.install	<p>LDAP related values. Can be either of the following values:</p> <ol style="list-style-type: none"> 1. true 2. false <p><i>If ldap.install=true, the following values must be provided:</i></p> <hr/> <ol style="list-style-type: none"> 1. <i>ldap.url</i> 2. <i>ldap.basedn</i> 3. <i>ldap.prefix</i>

Step	Action
	<p>Used to denote If the grid service installed or not: Potential values are:</p> <ol style="list-style-type: none"> 1. true 2. false <p>If grid.install=true, then the following values,should be provided:</p> <ol style="list-style-type: none"> 1. grid.index.url – The grid index server URL. Refer to Appendix III for the server url's. 2. grid.researchCenter.displayName 3. grid.researchCenter.shortName 4. grid.contactPerson.firstName 5. grid.contactPerson.lastName 6. grid.contactPerson.affiliation' 7. grid.contactPerson.addressLine1 8. grid.contactPerson.addressLine2 9. grid.contactPerson.stateProvince 10. grid.contactPerson.localityCity 11. grid.contactPerson.zip 12. grid.contactPerson.country 13. grid.contactPerson.emaiIld 14. grid.contactPerson.phone 15. grid.contactPerson.role
3.	<p>Record the property values you have set.</p> <p>Note: You shouldn't need to modify the other default values as we have chosen unique ports to reduce the risk of other applications using the same values. However, be sure to verify that the ports in this file are not being used by other applications.</p>
4.	<p>From the command line, navigate to <INSTALLER_DIRECTORY>, and type <i>ant</i>. This initiates the installation process. The anticipated duration is anywhere from 1-15 minutes, depending on your system's speed, power and memory.</p> <p>The installer installs the protExpress schema in the specified pre-existing database on your PostgreSQL 8.3.x server, and installs, configures, and starts an Apache Tomcat 5.5.20 server for both the protExpress application and the grid service.</p>
5.	<p>To verify protExpress installation, open your web browser to <a href="http://<tomcat.host.hostname>.<tomcat.host.port>/protExpress">http://<tomcat.host.hostname>.<tomcat.host.port>/protExpress (example; https://protexpress-dev.nci.nih.gov/protExpress/..</p>

Step	Action
6.	After successfully installing protExpress, make a backup of the <INSTALLER_DIRECTORY>/install.properties file in a different directory for future reference.

Reinstalling/Upgrading protExpress 1.0

You may want to upgrade protExpress 1.0 in either of the two situations:

1. Certain files are corrupted in the installation, and you want to re-install the application.
2. You may not have installed the grid service before, and want to install it now.

To perform an upgrade to protExpress 1.0 using the command-line, follow these steps.

Step	Action				
1.	<p>From the directory where you downloaded the protExpress_Upgrade_1.0.zip file, unzip the files, using one of these two methods:</p> <ol style="list-style-type: none"> a. Open a command prompt and use it to extract this file to a temporary location. <ol style="list-style-type: none"> a. For example, you may enter a command as below. You must have a ZIP tool installed. <pre>unzip -q protExpress_Upgrade_1.0.zip</pre> b. Use WinZip or a similar utility to unzip the files. <p>IMPORTANT: Remember the location where the files were extracted. This location will be referred to as the <INSTALLER_DIRECTORY>.</p>				
2.	<ul style="list-style-type: none"> • Edit the properties file: < INSTALLER_DIRECTORY>/upgrade.properties. • Update the values in the properties file, as appropriate. At a minimum, you will need to modify the below values: <table> <tr> <td>application.install.path</td><td> <p>The location where you want to install protExpress.</p> <p><i>Example:</i> In Windows, it could be C:/apps/protExpress. Linux users can use \${user.home}/apps/protExpress or any other folder to which you have write permissions.</p> <p>Important: This directory must be different than < INSTALLER_DIRECTORY> or the installation will fail.</p> </td></tr> <tr> <td>application.build.node</td><td>A text string that denotes the location of the research center/lab/facility that is installing protExpress</td></tr> </table>	application.install.path	<p>The location where you want to install protExpress.</p> <p><i>Example:</i> In Windows, it could be C:/apps/protExpress. Linux users can use \${user.home}/apps/protExpress or any other folder to which you have write permissions.</p> <p>Important: This directory must be different than < INSTALLER_DIRECTORY> or the installation will fail.</p>	application.build.node	A text string that denotes the location of the research center/lab/facility that is installing protExpress
application.install.path	<p>The location where you want to install protExpress.</p> <p><i>Example:</i> In Windows, it could be C:/apps/protExpress. Linux users can use \${user.home}/apps/protExpress or any other folder to which you have write permissions.</p> <p>Important: This directory must be different than < INSTALLER_DIRECTORY> or the installation will fail.</p>				
application.build.node	A text string that denotes the location of the research center/lab/facility that is installing protExpress				

Step	Action	
	tomcat.host.name	This value <u>must</u> correspond to the domain name of machine that hosts the application server. You may need to consult your system administrator for this information.
	database.server	This value <u>must</u> correspond to the domain name of machine that hosts the PostgreSQL 8.3.x database server. You may need to consult your system administrator for this information.
	database.port	This value <u>must</u> correspond to the port for the PostgreSQL 8.3.x database server. 5432 is the default port, but check with your database administrator to be certain.
	database.name	The name of the database. Example: protExpress
	database.user	The name for the database user who can access and create objects in the UPT database.
	database.password	Password for the above mentioned user.
	mail.smtp.host	SMTP Mail server for sending outgoing emails.
	mail.smtp.port	Outgoing email server port number.
	ldap.install	LDAP related values. Can be either of the following values: <ol style="list-style-type: none"> 1. true 2. false <p><i>If ldap.install=true, the following values must be provided:</i></p> <hr/> <ol style="list-style-type: none"> 1. ldap.url 2. ldap.basedn 3. ldap.prefix <hr/>

Step	Action
	<p>Used to denote If the grid service installed or not: Potential values are:</p> <ol style="list-style-type: none"> 1. true 2. false <p>If grid.install=true, then the following values,should be provided:</p> <ol style="list-style-type: none"> 1. grid.index.url – The grid index server URL. Refer to Appendix III for the server url's. 2. grid.researchCenter.displayName 3. grid.researchCenter.shortName 4. grid.contactPerson.firstName 5. grid.contactPerson.lastName 6. grid.contactPerson.affiliation' 7. grid.contactPerson.addressLine1 8. grid.contactPerson.addressLine2 9. grid.contactPerson.stateProvince 10. grid.contactPerson.localityCity 11. grid.contactPerson.zip 12. grid.contactPerson.country 13. grid.contactPerson.emaiId 14. grid.contactPerson.phone 15. grid.contactPerson.role
3.	<p>Record the property values you have set.</p> <p>Note: You shouldn't need to modify the other default values as we have chosen unique ports to reduce the risk of other applications using the same values. However, be sure to verify that the ports in this file are not being used by other applications.</p>
4.	<p>From the command line, navigate to <INSTALLER_DIRECTORY>, and type <i>ant</i>. This initiates the installation process. The anticipated duration is anywhere from 1-15 minutes, depending on your system's speed, power and memory.</p> <p>The upgrader upgrades , configures, and starts an Apache Tomcat 5.5.20 server for both the protExpress application and the grid service.</p>
5.	<p>To verify protExpress installation, open your web browser to <a href="http://<tomcat.host.hostname>.<tomcat.host.port>/protExpress">http://<tomcat.host.hostname>.<tomcat.host.port>/protExpress (example; https://protexpress-dev.nci.nih.gov/protExpress/..</p>
6.	<p>After successfully installing protExpress, make a backup of the <INSTALLER_DIRECTORY>/upgrade.properties file in a different directory for future reference.</p>

Chapter 7 Post-Installation Tasks

Using UPT to Add protExpress Users

To use the UPT, follow these steps:

Step	Action
1	Install UPT. For more information, see page 13.
2	Launch a browser and access UPT via <a href="http://<jboss.server.hostname>:<jboss.server.port>/upt">http://<jboss.server.hostname>:<jboss.server.port>/upt (from UPT's <code>install.properties</code>).
3	<i>Login to UPT, using the following profile:</i> <ul style="list-style-type: none">• <i>Login ID</i>=superadmin• <i>Password</i>=changeme• <i>Application Name</i>=csmupt
4	Select the User tab at the top of the page, and click Create a New User .
5	Enter Login Name , User First Name , User Last Name , User Password , User Password Confirm . Click Add .
6	On the Application tab at the top of the screen, click Create a New Application .

Step	Action
7	<p>Enter the following parameters:</p> <ul style="list-style-type: none"> • Application Name=protExpress • Application Description=<Application Description> • Application Declarative Flag=Yes • Application Active Flag=Yes • Application Database URL= jdbc:postgresql://\${database.server}:\${database.port} /\${protExpress.database.name} • Application Database User Name=\${protExpress.database.user} • Application Database User Password=\${protExpress.database.password} • Application Database Confirm Password=\${protExpress.database.password} • Application Database Dialect=org.hibernate.dialect.PostgreSQLDialect • Application Database Driver=org.postgresql.Driver
8	Click Add > Associated Admins , then select Assign Admin .
9	Highlight the user you want to be administrator of the application and then click Assign Admin .
10	Log out of UPT.
11	<p>Login to UPT at <a href="http://<jboss.server.hostname>:<jboss.server.port>/upt">http://<jboss.server.hostname>:<jboss.server.port>/upt. Use the following login profile:</p> <ul style="list-style-type: none"> • Login ID=<User created above> • Password=<Password for User created above> • Application Name=protExpress
12	Add users to the protExpress application like in the previous step.
13	Click Logout .

Appendix A Default Users

The following user is provided by default by the protExpress installer. The password is **Pr0tu5@r!!**

- **user1**

Appendix B Grid Index Server URL

The index server urls for Grid Service registration are:

- **PRODUCTION Grid:** Available outside the NIH Firewall
<http://cagrid-index.nci.nih.gov:8080/wsrf/services/DefaultIndexService>
- **QA Grid:** Available within the NIH network only
 - <http://cagrid-index-qa.nci.nih.gov:8080/wsrf/services/DefaultIndexService>
- **Staging Grid:** Available within the NIH network only
 - <http://cagrid-index-stage.nci.nih.gov:8080/wsrf/services/DefaultIndexService>
- **Training Grid:** Available within the NIH network only
 - <http://training03.cagrid.org:6080/wsrf/services/DefaultIndexService>

Appendix C Contacting Application Support

NCICB
Application
Support

<http://ncicb.nci.nih.gov/NCICB/support>

Telephone: 301-451-4384

Toll free: 888-478-4423