Protect your investments with Protection!





# **Protection**<sup>tm</sup>

## **v 5**

# **Administrator Guide**

http://www.jproductivity.com

**Revision** 99 - 2/10/2021

#### **Notice of Copyright**

Published by jProductivity, LLC Copyright ©2003-2021 All rights reserved.

#### **Registered Trademarks and Proprietary Names**

Product names mentioned in this document may be trademarks or registered trademarks of jProductivity, LLC or other hardware, software, or service providers and are used herein for identification purposes only.

#### Applicability

This document applies to Protection! Enterprise v5 software.

## Contents

Contents	3
1. Overview	
1.1 About Protection! Enterprise and its Components	
1.2 Quick Start	
2. Database Setup	
2.1 Oracle Database	
2.2 MySQL Database	
3. Configuring Protection! Enterprise	
3.1 Connecting to the Database	
3.2 Products Import	
4. Configuring Client Application	
4.1 Configuring Licensing Façade Connection via Protection! Control Center	
4.2 Configuring Licensing Façade Connection in the Source Code	
4.3 Using Several Accounts	
5. Building and Deploying Protection! WS Application	12
5.1 Configuring Protection! Web Services Application	
5.2 Deploying Protection! Web Services Application	13
5.3 Fine-tuning	
6. Common Administrative Tasks	15
6.1 Introduction	15
6.2 Introduction to Accounts	15
6.3 Introduction to License E-mail Messages	16
6.4 Editing Customer Information	
6.5 Editing License Information	17
6.6 Adding new License Action	17
6.7 Managing the Number of Available Activations	17
6.8 Using Views	18
6.9 Using Quick Search	18
6.10 Quick Navigation	
6.11 Importing	
6.12 Exporting	
6.13 Protection! Connect Configuration	19
7. Known Issues and Limitations	
7.1 Oracle Database 10g XE	
7.1.1 ORA-12705: Cannot access NLS data files or invalid environment specified	
7.1.2 ORA-12519: TNS:no appropriate service handler found error	
Appendix A. Oracle Database Structure Diagram	
Appendix B. MySQL Database Structure Diagram	23

## **Overview**

## **1.1 About Protection! Enterprise and its Components**

Protection! Enterprise is a complete turnkey solution designed to bring real value to software publishers by providing full automation of licensing processes together with management of licenses, customers, and evaluators.

Protection! Enterprise is orchestrated to seamlessly work together with all other Protection! Licensing Toolkit products in one feature-rich and coherent environment.

Protection! Enterprise oversees and manages licenses, license actions and customers. Software publishers / vendors are able to track evaluation licenses requested by users, manage commercial licenses issued to customers, manage licenses activation and deactivation.

Protection! Enterprise consists of the following components:

- Protection! Enterprise Manager (a rich GUI client for managing all aspects of the license processes, customers and their licenses, etc.)
- Protection! Enterprise Server: a plug-in to Protection! Web Services Application, set of libraries and database DDL scripts necessary to create a database.

## 1.2 Quick Start

The following information is intended to get you up and running as quickly as possible and covers these topics:

- Database Setup
- <u>Configuring Protection! Enterprise</u>
- Configuring Client Applications
- Building and Deploying Protection! WS Application

## **Database Setup**

This chapter describes how to create and set up database suitable for running the Protection! Enterprise. At this time only the Oracle and MySQL databases are supported; support for other databases will be added in the future updates.

## 2.1 Oracle Database

To create an Oracle database the Oracle Database Server should be up and running. Supported Oracle Database versions are: Oracle 9*g* and later. All Oracle Database editions (including Oracle Enterprise, Oracle Standard, Oracle Standard One and Oracle Express) are supported. The following steps should be done in order to create Oracle database:

- 1. Copy <code>Oracle/create\_db.sql</code> and <code>Oracle/ProtectionEnt.sql</code> files where the Oracle Server is installed and running. Or copy to any other system where Oracle Client is installed.
- 2. Run <code>create\_db.sql script</code> using the Oracle SQL\*Plus utility by typing the following command

```
sqlplus.exe /nolog @create db.sql
```

in the command line from the folder where the above mentioned files are copied to.

- 3. Enter a value or press enter to accept default values for the next prompts:
  - a. "DB server name" Oracle Database Server name. By default it is localhost. Use default value when executing the above command from the same system where Oracle Database Server is up and running.
  - b. "SYSTEM password" Oracle system user password.
  - c. "Application user name" Oracle user name to be created to store the application tables and data. Default value is *protection* (you should edit create\_db.sql file to change this default application user name).
  - d. "Application user password" the password for the application user. Default value is *protection\_pwd* (you should edit create\_db.sql file to change this default application user password).
  - e. "User data tablespace" Oracle table space to store the application's user data. By default it is USERS which is created by default in the Oracle Express Edition.
  - f. "*Temporary tablespace*" Oracle tablespace to store the temporary data. By default it is *TEMP* which is created by default in the Oracle Express Edition.
- 4. After finishing check create db.log file for any errors.

## 2.2 MySQL Database

To create a MySQL database the MySQL Server should be up and running. Supported MySQL Server versions are MySQL 5.x and later. The following steps should be done in order to create MySQL database:

- 1. Install MySQL Database Server if it has not been installed yet. The server MUST be configured and run in transactional mode.
- 2. Copy MySQL/create\_db.sql and MySQL/ProtectionEnt.sql files to the server that MySQL Server is installed on.
- 3. Open the create\_db.sql file in the editor and change the "database name" (by default protection), the "user name" (by default protection) and the "user password" (by default protection\_pwd) if required. Make sure that the "GRANT" command refers to the correct database and the user name if either has been changed. Check the path to the log file (by default it is c:/create\_db.log) and the ProtectionEnt.sql file (by default it is c:/ProtectionEnt.sql).
- 4. Run the "MySQL Command Line Client" application.
- 5. Enter the MySQL Database server root password.
- 6. Run the create\_db.sql script by typing the following command at the prompt:

\. [path/]create\_db.sql

For example:

\. c:/create db.sql

This script will create the database named "*protection"*, the database user "*protection"* with the password "*protection\_pwd"*.

- 7. Type exit when finished.
- 8. Check the create\_db.log file for errors.

## **Configuring Protection! Enterprise**

This chapter outlines the steps necessary for the initial configuration of Protection! Enterprise using the Protection! Enterprise Manager so Protection! Enterprise Server can issue evaluation and commercial licenses to the customers.

The Protection! Enterprise Manager should be launched in order to start initial configuration.

## 3.1 Connecting to the Database

If this is the first time you are connecting to the Protection! Enterprise Database then you would be presented with the "*Database Accounts"* dialog allowing you to set-up new connection. In this dialog:

- 1. Click the "New" button to start the "New Database Connection" dialog.
- 2. Specify some descriptive name for this connection.
- 3. Chose the appropriate driver:
  - a. for MySQL: com.mysql.jdbc.Driver.
  - **b. for Oracle:** oracle.jdbc.OracleDriver.
- 4. Specify the appropriate connection URL:
   a. For MySQL: jdbc:mysql://<server>:<port3306>/<database>
  - O MySQL. Jabc:mysql://server>:<port3306>/<database>
  - (e.g. jdbc:mysql://localhost:3306/protection)
  - b. For Oracle: jdbc:oracle:thin:@<server>:<port>:<sid>
    - (e.g. jdbc:oracle:thin:@localhost:1521:xe)
- 5. Provide the appropriate authentication parameters (use the same user/password as used during the creation of the database e.g. *protection* and *protection\_pwd* correspondingly).
- 6. Click the "*OK*" button to commit new connection configuration.
- 7. Click the "*OK*" button to commit all the connections and close the "*Database Accounts*" dialog.

You will be presented with the "Login Screen" in which you are able to:

- 1. Choose the account to connect using the "Account" dropdown.
- 2. Specify the "User Name": admin (Note: you can change this user name at a later time).
- 3. Specify the "*Password"*: default password is blank (you should change this password at your earliest convenience (see instructions below)).
- 4. Press the "*Login*" button to login to the database.

## **3.2 Products Import**

If this is a new (clean) database then you would be presented with the "*Products Import Assistant"* that will guide you through the process of importing existing products into the Protection! Enterprise Database. In this dialog you can:

- 1. Specify the location of previously configured products storage. Note: make sure to use the exact same product storage that you would be using to build Protection! Web Services Application (see Chapter 4).
- 2. Click the "*Next"* button.
- 3. If product storage contains multiple products then you will need to indicate which products you would like to import.
- 4. Check the "*Create Default Accounts and E-mail Templates"* option to enable automatic creation of default account and e-mail templates.
- 5. Click the "*Finish"* button.
- 6. After a brief import process you will be presented with results of the import process. This info could be copied (html format) for later review and backup. "Import results" dialog outlines Accounts and E-Mail templates that have been created for your convenience. You are free to add any new accounts and e-mail templates or to modify any accounts and e-mail templates generated by default. Default accounts are created with the simple login name and password combination. It is very important to change the default created password before using Protection! Enterprise in the production environment.
- 7. Click the "*Close"* button to close the Product Import Assistant.

By default the following accounts will be created for each product (we will use a product called "*Test*" as an example):

- 1. "*Test\_trial"* this account is intended to be used by the client applications to request trial licenses. All of the requested trial licenses will be delivered to the customers by e-mail.
- 2. "*Test\_activation"* this account is intended to be used by the client applications to activate/deactivate licenses. All of the activated licenses will be delivered to customers via online delivery.
- 3. "Test\_sales" this account is intended to be used by the sales staff to deliver licenses of any type to customers through Protection! Enterprise. It is disabled by default; therefore in order for this account to be used it should be manually enabled by the administrator. It is strongly recommended to change this account's password before enabling it.

By default three e-mail templates will be created for each product – one template per each particular license type.

If, after the initial product import, the product's configuration is changed then such products need to be re-imported into the Protection! Enterprise. To apply changes in the product's configuration the "*Products Import Assistant"* may be called at any time by choosing the "*File* | *Import* | *Products"* menu item.

After you successfully imported products, you should modify optionally generated default accounts and e-mail templates before Protection! Enterprise is to be used in the production environment. At a minimum, you should modify default generated passwords.

## **Configuring Client Application**

This chapter outlines how to set up connection to the Protection! Enterprise in the client applications.

It is possible to configure this connection either in the Protection! Control Center or by changing source code manually.

## 4.1 Configuring Licensing Façade Connection via Protection! Control Center

You need to run the Protection! Developer Control Center and navigate to a desired product in the Products Screen. When the desired product is selected, you should edit such product configuration using the "*Edit Product"* dialog, which can be invoked by pressing the *Enter* key or mouse double-click. In the dialog, the "*Façade"* page which is responsible for Licensing Façade configuration should be selected.

In the "*Façade"* page the following attributes should be specified:

- 1. "*Connection"* specifies the type of connection. You must choose the *Web Services* as connection type to be used for Protection! Enterprise.
- "URL" specifies location of the Protection! Enterprise Server. The usual form of that URL is

http://www.vendordomain.com:8080/ProtectionWS/services/LicensingFacade

where www.vendordomain.com should be the name of the server that will be hosting the Protection! Enterprise Server.

3. "Login" and "Password" – specify authentication parameters. These are the same login and password combination specified in the account's configuration (see Chapters 6.2 in this guide for more info on Accounts and their configuration options). For example, after the import process of the "Test" product the login and password would be the Test\_trial and Test\_trial\_pwd correspondingly.

After completion of configuration, accept changes in the Product Edit dialog by pressing the "OK'' button and save products storage.



You should save the generated code snippet or re-build Launcher to synchronize product changes with your application.

## 4.2 Configuring Licensing Façade Connection in the Source Code

Licensing Façade configuration should be done in the source code by registering Web Services implementation and providing all of the required parameters:

 "URL" – specifies location of the Protection! Enterprise Server. The usual form of that URL is

http://www.vendordomain.com:8080/ProtectionWS/services/LicensingFacade

where www.vendordomain.com should be the name of the server that will be hosting the Protection! Enterprise Server.

 "Login" and "Password" – specify authentication parameters. These are the same login and password combination specified in the account's configuration (see Chapters 6.2 in this guide for more info on Accounts and their configuration options). For example, after the import process of the "Test" product the login and password would be the Test\_trial and Test\_trial\_pwd correspondingly.

Sample code is as follows:

```
LicensingFacadeProvider.addProvider("WS",
  new LicensingFacadeWS.Provider(new URL("http://www.vendordomain.com"+
    "/ProtectionWS/services/LicensingFacade"),
    "Test trial", "Test trial pwd"));
```

#### 4.3 Using Several Accounts

It is common practice to have several accounts configured in Protection! Enterprise Server with each account responsible for specific license types, license actions, delivery methods, etc. For example: one account could be configured only for dealing with requests to obtain Trial licenses (which would be delivered by e-mail) and another account for license activation/deactivation (which would be delivered online).

To implement multiple accounts, several connections should be configured. In our example: if in addition to a previously configured connection that is responsible for Trial licenses (see Chapter 4.2) a new connection that would be responsible for handling activation/deactivation needs to be added, then it could be configured as follows:

```
LicensingFacadeProvider.addProvider("WS_Activation",
    new LicensingFacadeWS.Provider(new URL("http://www.vendordomain.com"+
    "/ProtectionWS/services/LicensingFacade"),
    "Test_activation", "Test_activation_pwd"));
```

The issue resolvers can be configured to use specific connections: 1. For Licenses acquisition:

```
((DefaultLicenseHostIssueResolver) fProtectionLauncher.
getLicenseHost().getIssueResolver()).
setActivationFacadeProviderName("WS");
((DefaultLicenseReaderIssueResolverPro).fProtectionLauncher.
getLicenseReader().getIssueResolver()).
setLicensingFacadeProviderName("WS");
```

2. For Licenses Activation/Deactivation:

```
((DefaultLicenseHostIssueResolver) licenseHost.getIssueResolver()).
   setActivationFacadeProviderName("WS Activation");
```

If several providers were registered, one of them can be marked as default one:

LicensingFacadeProvider.getInstance("WS").setDefault(true);

This allows using this default provider for all cases when no explicit provider names are specified.

## **Building and Deploying Protection! WS Application**

This chapter outlines how to configure and deploy the Protection! Enterprise Server which is represented by Protection! Web Services Application with the Enterprise plugin.

## 5.1 Configuring Protection! Web Services Application

Protection! Developer Control Center's Licensing Facade Configuration Dialog provides the ability to specify configurations necessary to generate and to deploy Protection!'s Web Services application. For more information on Licensing Facade configuration dialog see the *Protection! User Guide*.

To configure Licensing Façade for Protection! Enterprise:

- 1. In Protection! Control Center open the desired product storage.
- 2. Launch the "*Licensing Façade Configuration"* dialog. This dialog can be invoked either by selecting the "*Edit* | *Licensing Facade Config"* menu item, or an *Alt+F* key combination while the Edit menu in the Protection! Developer Control Center is active.
- 3. Apply the following settings in the "General" tab:
  - a. Specify path to the Protection! Backend Deployment license.

If you need a license you may either:

- Buy a deployment license at: <u>http://www.jproductivity.com/products/protection/buy.htm</u>
- Request a trial license at: <u>http://www.jproductivity.com/products/protection/ent\_trial.htm</u>
- b. The following sections could be skipped as they all would be configured in Protection! Enterprise Manager:
  - i. "Login Information".
  - ii. "Actions Allowed".
  - iii. "Delivery Type".
- 4. Apply the following settings in the "*Plug-in"* tab:
  - a. Check the "Enable plug-in" checkbox.
  - b. Specify the following "Factory Class" to be used:

com.jp.protection.priv.pro.integration.ent.EnterpriseExtensionFactory

- c. Add the following libraries (located in the server folder):
  - i. ProtectionEnt.jar
  - ii. lib/commons-collections-3.1.jar
  - iii. lib/commons-dbcp-1.2.1.jar
  - iv. lib/commons-pool-1.2.jar
    - v. lib/jackson-core.jar
  - vi. lib/jackson-mapper.jar
  - vii. lib/ojdbc14.jar or lib/mysql-connector-java-5.1.6-bin.jar JDBC driver for Oracle and MySQL respectively.

Tip

Bundled Oracle JDBC driver (<code>ojdbc14.jar</code>) is suitable for Oracle 10g/XE database. For other Oracle versions please download the correct driver at:

http://www.oracle.com/technology/software/tech/java/sqlj\_jdbc/index.html

and use it to build Protection! Web Services Application instead of ojdbc14.jar.

- 5. Apply the following settings in the "*E-mail Options"* tab:
  - a. Turn on the "Enable E-mail Sending" option.
  - b. Specify E-mail settings.
- 6. Skip E-mail Template (this option could be skipped as it will be configured in the Protection! DB Enterprise Manager).
- 7. Apply the following settings in the "DBOptions" tab:
  - a. Enable database support.
  - b. Indicate driver and URL.
  - c. Indicate authentication for the database (login and password).
- 8. Click the "OK" button to accept all settings and close the dialog.

## 5.2 Deploying Protection! Web Services Application

After the Protection! Web Services Application is properly configured and built it needs to be deployed to the compatible container (Application Server).

The first step is to build ready-to-deploy Protection! Web Services Application. This is done by using the "*File* | *Generate WS*" menu item in the Products Screen in the Protection! Developer Control Center. This command bundles Protection! Deployment License, currently opened products storage, and configuration with Protection Web Services Application's core and then saves the configured Web application to a ready-to-deploy WAR (Web Application Archive) file (ProtectionWS.war by default).

The next step is to deploy the generated web services application to a compatible Web container e.g. Apache Tomcat 5.x. Please refer to the "How to deploy Web applications" or similar topics in your Web container. When Protection! Web Services Application has been deployed and running it is ready to serve clients by allowing them to get or activate licenses.

The simple test to see that Protection! Web Services Application is up and running is done by opening the Licensing Façade URL with the "?wsdl" command in your Web browser. For example the following link:

http://services.jproductivity.net:8080/ProtectionWS/services/LicensingFacade?wsdl

will show a WSDL descriptor of running Protection! Web Services Application at the jProductivity Web site.

Note

The current implementation does not provide any ability to configure an already deployed Protection! Web Services Application. To do so the application should be reconfigured and then re-deployed. This allows for publishing product's changes (e.g. products addition, removal or modifications or changes of any other options) to the Protection! Enterprise Server.

## 5.3 Fine-tuning

It is possible to fine-tune Protection! Enterprise Server by specifying the following system properties for J2EE container (e.g. GlassFish):

-Dcom.jp.protection.priv.pro.integration.ent.

alwaysReturnLicenseBytes=true

If this option is specified – server will always return License bytes disregarding License delivery type. It can be in help when Licenses need to be delivered by e-mail but License copies need to be backed-up in some other storage.

-Dcom.jp.protection.priv.pro.integration.ent. skipNumberCopiesCheckOnGetForAccounts=account(s)

If this option is specified – server will allow getting any number of the same license for the certain account(s) disregarding License's Number of Copies value. The value of the property is an account (login) or a list of accounts (logins) delimited by semicolons.

## **Common Administrative Tasks**

This topic briefly outlines some of the most common administrative tasks that can be done in the Protection! Enterprise Manager.

## 6.1 Introduction

The Protection! Enterprise Manager exposes all of its functionality through the following screens:

- "License Actions" This screen provides the ability to view and manage license actions.
- "*Licenses"* This screen provides the ability to view and manage licenses, customers to whom a given license was issued and all of the license actions performed with each specific customer's license.
- "Customers" This screen provides the ability to view and manage Customers, their licenses and all of the license actions performed with each specific license.
- "*Reports"* This screen provides the ability to view and print reports on various licensing activities.

## **6.2 Introduction to Accounts**

Account is a named list of permissions which grants access to the particular licensing actions for a particular product. The client application must refer to a particular Account by providing the account's login and password attributes in order to get or activate licenses.

The "*Accounts"* dialog provides the ability to create new or to modify existing accounts. It can be invoked by choosing the "*Edit* | *Accounts"* menu item.

The following are the major attributes of the Account:

- "Login" login name which uniquely identifies a particular Account.
- "Password" Account's password.
- "*Permissions"* a list of Account's permissions. Each Account Permission has the following attributes:
  - "*Product"* indicates a product name to which account's permission will apply.
  - "*Delivery Type"* indicates how licenses for account's permission will be delivered to the customer. Possible values are *E-mail* or *Online*.
  - "Actions Allowed" indicates what actions would be allowed by this permission:
    - "Get" allows license requests using full license information.
    - "Get by Descriptor" allows license requests by using product id; license type and product's major version.
    - "*Get by S/N"* allows license requests by Serial Numbers.
    - "Activation" allows license activations.
    - "Deactivation" allows license deactivations.

- "*License Types Allowed to Get"* indicates the type of licenses that could be requested for this permission:
  - "Commercial" specifies that Commercial licenses are allowed to be requested.
  - "Evaluation" specifies that Evaluation licenses are allowed to be requested.
  - "Extended Evaluation" specifies that Extended Evaluation licenses are allowed to be requested.

#### 6.3 Introduction to License E-mail Messages

The License E-mail Message is a template which can be used to create custom e-mails that would be used during license distribution via e-mail delivery. Each e-mail message template is created for a combination of specific product, license and action attributes.

The "*License E-mail Message"* dialog provides the ability to create new or to modify existing e-mail messages. It can be invoked by choosing the "*Edit* | *E-Mail Messages* | *License"* menu item.

This dialog shows currently configured License E-mail Message for a given product. To edit an existing License E-mail Message either double-click the desired template or click the "*Edit"* button when the desired message is selected. To create a new License E-mail Message for a selected product click the "*New"* button.

Each product may have several License E-mail Messages for various combinations of the following attributes:

- "*Product Edition"* specific product edition or *<Any>* value.
- "*License Major Version"* specific number or *<Any>* value.
- "License Type" possible values are Commercial, Evaluation, Extended Evaluation and <Any> value.
- "Action Type" possible values are Get, Activation, Deactivation and <Any> value.

When a license needs to be delivered by e-mail, Protection! Enterprise tries to find the best suitable License E-mail Message by "walking" through the list of the available License E-mail Messages according to the following rules:

1. Find a message for the exact match of the Product Edition + License Major Version + License Type + Action Type attributes

or

2. Find a message for a partial match of Product Edition +License Major Version + License Type + Action Type attributes while "honoring" <*Any* > value types.

The license E-mail Message does not carry the "*TO*" attribute as it always will be the e-mail address of the customer who had requested the license.

For each of the License E-mail Messages it is possible to specify the "CC" and the "BCC" attributes to allow sending copies of e-mail message to other interested parties.

The "Subject" and the "Text" attributes of the License E-mail Message may contain macro variables in addition to their plain text content. Such variables will be dynamically resolved at the time of e-mail generation and will be replaced by the actual attributes of particular license, customer and license's product. Each variable represents a specific

attribute's name surrounded by the following opening/closing tag combinations: " $\{$ " (opening tag) and the " $\}$ " (closing tag).

For example: the text "Dear \${customer.firstName} \${customer.lastName}" will be
rendered as the "Dear John Doe" text.

For the "Subject" and "Text" fields it is possible to use the handy Code Complete (Ctrl+Space) feature to be with the list of available macro variables. This feature can be used to insert the selected macro variables at the caret location.

At any time the e-mail could be previewed (using sample data) in its final form using the "*Preview"* button.

In order for Protection! Enterprise to be able to deliver licenses by e-mail proper configuration settings must be specified during the configuration of Protection! Web Services Application (see Chapter 5.1).

## 6.4 Editing Customer Information

Note

To edit the customer's information click on Customers shortcut, select the desired customer and choose the "*Edit*" menu item. You can also double-click the desired customer and click the "*Edit*" button from within the "*Customer Details*" dialog.

## 6.5 Editing License Information

To edit license information click on Licenses shortcut, select the desired license and choose the "*Edit*" menu item. You can also double-click the desired license and click then "*Edit*" button from within the "*License Details*" dialog.

## 6.6 Adding new License Action

There could be a need to manually add a new License Action. For example: In some cases the customer would be unable to activate a license via online mode. In this case the publisher will have to activate the license via off-line mode by using Protection! Control Center application. However, when this happens, Protection! Enterprise would have no knowledge of such activation activity. To remedy this situation, the publisher would have to manually add the new license action for the specific license + customer combination.

To add a new License Activity choose the "*File* | *New License Action"* menu item. In the "*New License Action"* dialog both License and Customer fields could be either manually populated by creating new license or new customer, or by automatically populating all required fields by selecting either an existing license or an existing customer from the database.

## 6.7 Managing the Number of Available Activations

There could be a need to manually increase the number of available license activations. For example: In some cases a customer would be unable to deactivate a license (either online or offline). Such a situation can happen due to a customer's system failure. In this case the license would need to be re-activated. To remedy such a situation and to allow Protection! Enterprise to perform activation of an already activated license the number of available activations has to be increased. To increase a number of available activations you would need to edit the license in question. To edit license information click on Licenses shortcut, select the desired license and choose the "Edit" button from within the "License Details" dialog. In the "Edit License" dialog you can increase or decrease the number of available activations by entering a specific value in the "Available Activations" field.

## 6.8 Using Views

The Protection! Enterprise Manager supports the concept of views to simplify working with data presented in grids. Each view holds the following attributes:

- Grouping.
- Columns to show, their order and widths.
- Filter (implemented on the database level).

You can choose the desired view via the "Views" dropdown on the application toolbar.

The currently selected view can be customized through the "*View Configuration"* dialog which can be invoked by pressing the "*Customize View"* button on the toolbar.

## 6.9 Using Quick Search

It is possible to temporary filter-out the current view and to only show records that match search text. Quick searching can be done by typing specific text in the "Quick Search" field located at the top-right of the screen. The Ctrl+F shortcut allows for quick navigation (jump) to the "Quick Search" field. Pressing the Enter key (when the "Quick Search" filed has focus) moves focus back to the grid.

## 6.10 Quick Navigation

The following are quick ways to navigate to specific information:

- <u>To quickly find a desired record</u> in the grid click on the grid and start typing text to find.
- <u>To locate a License and Customer for selected License Action</u> right-click to show the context menu and choose the "*Go to License*" or "*Go to Customer*" menu items.
- <u>To locate a License</u> in the License Screen select desired License in any grid, rightclick to show the context menu and choose the "*Go to License"* menu item.
- <u>To locate a Customer</u> in the Customer Screen select the desired Customer in any grid, right-click to show the context menu and choose the "*Go to Customer*" menu item.
- <u>To locate a License Action</u> in the License Actions Screen select desired License Action in any grid, right-click to show the context menu and choose the "Go to License Action" menu item.
- <u>To send e-mail to a Customer</u> select the desired customer in any grid, right-click to show the context menu and choose the "*Send E-mail"* menu item.

• <u>To open Customer's Web site</u> – select the desired customer in any grid, right-click to show the context menu and choose the "*Open Web Site*" menu item.

## 6.11 Importing

It is possible to import:

- 1. Products import products and optionally create default accounts and e-mail messages. Product's import can be done by choosing the "*File* | *Import* | *Product"* menu item.
- 2. License Actions import license actions from the log file generated by the Protection! Sales application. License Actions import can be done by choosing the "File | Import | License Actions" menu item.

It is also possible to initiate the import process by dragging a file from the file manager (e.g. Windows Explorer) and dropping it into the Protection! Enterprise Manager window.

## 6.12 Exporting

It is possible to export:

- 1. Evaluators export prospective customers who had already requested Trial licenses but have not purchased commercial license yet. Evaluators can be exported by choosing the "*File* | *Export* | *Evaluators*" menu item.
- Current View export the contents of current view. Current View export can be done by choosing the "*File* | *Export* | *Current View*" menu item. It is also possible to initiate the export process by dragging view contents out of the Protection! Enterprise Manager window.

## 6.13 Protection! Connect Configuration

Protection! Enterprise should be properly configured to allow for communication of change notifications to Protection! Connect<sup>M</sup>. Note: this option is turned OFF by default. It can be configured by choosing the "*Edit* | *Protection! Connect Account*" menu item in the Protection! Enterprise Manager.

Note

The user provided for authorization must be a registered user belonging to *protection* group in the GlassFish Application Server where Protection! Connect<sup>TM</sup> is deployed to. See Chapter 2.3 in the "Protection! Connect Administrator Guide" for more information.

## **Known Issues and Limitations**

This chapter describes known problems and associated workarounds for the Protection! Enterprise v4.2 software. If a summary statement does not specify a particular platform, the problem applies to all platforms.

## 7.1 Oracle Database 10g XE

The following are the list of known issues and associated workarounds for the Oracle Database 10g XE.

#### 7.1.1 ORA-12705: Cannot access NLS data files or invalid environment specified

There is a known issue with the Oracle Database 10g XE that rejects client connections from computers with locales belonging to some CIS alliance countries (e.g. Russia). The error in this case is "ORA-12705: Cannot access NLS data files or invalid environment specified". The only known workaround is to override the default locale's country. For example by specifying the following Virtual Machine arguments: -Duser.country=UA.

#### 7.1.2 ORA-12519: TNS:no appropriate service handler found error

In some cases the "*ORA-12519, TNS:no appropriate service handler found error*" is occurred which prevents client computers from connecting to the Oracle Database 10*g* XE. The workaround for this issue is increasing the number of available processes for the database server. It can be done by running the following SQL command in the "*SQL Plus*" utility under the system user and restarting the database server:

ALTER SYSTEM SET PROCESSES=200 SCOPE=SPFILE;

If the error arises again the number of processes should be further increased.

As part of the continuing effort to improve our product, we welcome your comments, suggestions and general feedback regarding the product.

If you have questions about Protection! Enterprise please feel free to contact us for further information at <u>protection@jproductivity.com</u>, or visit our web site at: <u>http://www.jproductivity.com</u>.

If you discover any issues or defects in Protection! please send a detailed description to <u>protection@jproductivity.com</u>.





VARCHAR2(30)

PHONE

USER COUNT

SMALLINT

# Appendix B

## MySQL Database Structure Diagram

