

Release Notes

# **PROIV Version 9.1R0-SR1**

**July 2019**



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9.1R0	03 May 2019	Added new features and defects corrected
9.1R0-SR1	15 July 2019	Added Issues fixed

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# 1 Introduction

## 1.1 Document Structure

- Section 2 – Supported Platforms and Databases
- Section 3 – Getting Started with Version 9.0
- Section 4 – Component Specific Information
- Section 5 – Platform and Database Specific Information
- Section 6 – Issues

## 1.2 Upgrading Your Application

### 1.2.1 Upgrading from Version 8 to Version 9.0

PROIV version 9.0 is not gen compatible with any previous versions of PROIV. A mandatory Regen of all code is required when moving to PROIV version 9.0. If you are upgrading from v8 to v9, you must take a backup of your boots folder; export your application source code and import into v9.0 and then perform a regen of the application. Additionally, all existing set up options will need to be reconfigured using the new PROIV Dashboard.

### 1.2.2 Upgrading from Version 9.0 to Minor Version 9.1

PROIV version 9.1 is gen compatible with version 9.0; there is no mandatory regen requirement. When performing an upgrade using the binary installer it will update the executables and the contents of the bootstrap by isin'ing the version 9.1 developer.out (or administrator.out). An alternative approach is to export your code from version 9.0 and import into version 9.1 performing a subsequent Developer bulk build of the imported functions.

The upgrade will also upgrade the dashboard. Any deployed Client Connector, Application Connector or Analytics web applications will have their contents upgraded and redeployed to they state they were in when the upgrade was run. If any new configuration options are added to the templated web applications then they will be added to the upgraded web applications with default values.

## 1.3 End of Life Products

The following are withdrawn from PROIV Version 9.

### Components:

- PROIV Control Panel (Replaced with the PROIV Dashboard)

### Platforms:

- HP-UX
- Reality DB

## 2 System Requirements and Supported Platforms

The following table details about the compatibility of system requirements, platforms, databases and browsers for PROIV 9.1 components. For installation process, refer to PROIV v9.1 Installation guide.

PROIV Version 9.1 Server Supported Platforms								
Platform				Database Interface				
				MySQL	Oracle	SQL Server	PostgreSQL	C-ISAM
OS Name	Arch	Min OS	Max OS	5.7	11gR2 12c 18c	2014-SP2 2016-SP2 2017	9.4-9.6 10	7.26
Windows Server	64-bit	2012R2	2016	✓	✓	✓	✓	
Windows Workstation	64-bit	10	10	✓	✓	✓	✓	
Linux	64-bit x64	RedHat6	RedHat7	✓	✓		✓	✓
AIX	Power5+	AIX7.1 TL5 SP2	AIX7.1 TL5 SP5		✓			✓
Solaris	SPARC 64-bit	Solaris 10	Solaris 11		✓			✓

PROIV Version 9.1 Supported Client / Browser Platforms						
Platform		Browser				
		Microsoft			Google Chrome	Mozilla Firefox
OS Name	MFC Client	Edge	IE10	IE11	v68 Onwards	v58 Onwards
Windows 7	✓		✓	✓	✓	✓
Windows 8.1	✓		✓	✓	✓	✓
Windows 10	✓	✓		✓	✓	✓
Windows 2012R2	✓		✓	✓	✓	✓
Windows 2016	✓	✓		✓	✓	✓
iOS 8.1.1					✓	
Android 4.x					✓	

### 2.1 MFC Client / Forms Designer Platforms

The MFC Client and Forms Designer are 32-bit applications which are compatible with the Windows 7, 8.1 and 10 operating systems. Whilst the installation may be successful on

Windows XP, it is not a supported platform and is not tested; Zellis will not accept any fault reports or support issues on this platform.

Releases of new operating systems may function; however, these are not supported until formally stated on the PROIV website.

Support for Windows 7 will cease on the 14<sup>th</sup> January 2020.



## 3 Getting Started with Version 9

### 3.1 New Features 9.0

The following new features are included in this release.

#### 3.1.1 Hierarchical Configuration and Deployment Model

PROIV Version 9.0 Introduces the concept of a Hierarchical Configuration and Deployment model. This is achieved by the introduction of a new Configuration Dashboard which can be used to set-up and deploy multiple configurations for PROIV across your Enterprise. The requirement in Version 8 to maintain multiple configuration settings in various formats and dispersed locations is removed. The configuration of all your application is now managed in one place.

In addition to the configuration features of the dashboard it also introduces several other features:

- Enterprise management of configuration deployments using a new PROIV Dashboard
- Live Health Check status of all active deployments
- Segregation of Web Applications
- Separation of settings and operations

#### 3.1.2 Native PostgreSQL Driver Support

The reliance of PostgreSQL database applications on Open Database Connectivity (ODBC) technology has been removed. Connection to the database is now achieved using native drivers provided with the PostgreSQL software. This greatly simplifies the configuration and reduces the maintenance overhead associated with keeping the ODBC drivers synchronized to the database versions.

### 3.2 New Features 9.1

#### 3.2.1 RPM Distribution for Linux

Version 9.1 introduces an alternative installation model for PROIV on x64 Linux using the Redhat Package Manager (RPM) found on a number of commercial Linux distributions. PROIV has been split into a number of different RPMs with associated dependencies and as a consequence allows you to install selected parts of the product on the operating system.

The RPMs can be installed manually using the RPM command; it is also possible to deployment via a yum repository. Refer to the version 9 installation guide for further details.

The following table outlines the RPMs, their content and dependent RPMs within the PROIV suite.

Product RPM	Dependent RPMs	Description
proiv-admin	proiv-virtual-machine proiv-licensing-core	PROIV Administrator, or what was known as runtime PROIV bootstraps. Needs the virtual machine to execute
proiv-analytic-services	proiv-jetty proiv-system-services proiv-licence-services proiv-licensing-core	PROIV Performance monitor and profiler
proiv-application-services	proiv-jetty proiv-system-services proiv-licence-services proiv-licensing-core	PROIV Task, REST and SOAP web services interfaces
proiv-client-services	proiv-jetty proiv-system-services proiv-licence-services proiv-licensing-core	OpenClient, Aurora client application services
proiv-demo	proiv-devel proiv-virtual-machine proiv-licensing-core	PROIV Demo functions, installed on top of PROIV Developer
proiv-devel	proiv-virtual-machine proiv-licensing-core	PROIV Developer
proiv-full	All RPMs	Suite install of entire product for single command installation
proiv-jetty	None	Bundled Jetty Web Application Server used by PROIV
proiv-licence-services	proiv-jetty proiv-licensing-core	Licence server required by virtual machine and application services
proiv-licensing-core	None	Shared licensing
proiv-system-services	proiv-jetty proiv-licence-services proiv-licensing-core	PROIV Dashboard allowing configuration of application profiles
proiv-virtual-machine	proiv-licensing-core	PROIV VM without any bootstraps.

Using this layered approach it is entirely possible to install combinations of product component on different operating system instances thereby allowing a much more flexible deployment. For example the Virtual Machine on one operating system instance with its licence server on another instance.

### 3.3 Installation Differences

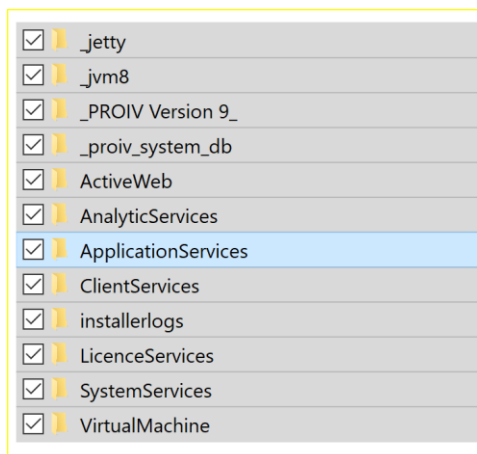
Up until the introduction of the RPM installation model; there was only one supported mechanism for installing PROIV; using a single installation executable generated with InstallAnywhere. This single installer is furthermore referred to as the “binary installer”.

#### 3.3.1 Differences Between Version 8 and Version 9 Installations with Binary Installer

Version 8 comprised 5 different server processes, either services on Windows or daemon processes on Unix. This number has been increased slightly to provide services and names that better represent their functionality. The following lists the new V9 services and their components

V9 Service / Process Name	Purpose
<b>PROIV V9 Analytic Services</b>	Performance Monitor and Profiler
<b>PROIV V9 Client Connector</b>	Connection providers for Open Client and Aurora
<b>PROIV V9 Application Connector</b>	Connection providers for Analytics, Licensing, Gateway and Web Services
<b>PROIV V9 Client VM</b>	PROIV Virtual Machine serving interactive clients such as MFC Client and Open Client
<b>PROIV V9 Gateway VM</b>	PROIV Virtual Machine serving non-interactive clients such as Tasks and Web Services
<b>PROIV V9 License Services</b>	PROIV License server
<b>PROIV V9 System Services</b>	Database and Lexicon Services

The PROIV version 9 installed directory structure is revised to reflect the new server grouping. The following snapshot shows the directory structure of version 9.



- **\_jetty** – the jetty web application server V9.1 and all the Jar files used by the V9 web applications. Note that the web applications no longer have multiple copies of the jar files
- **\_jvm8** – the Java Virtual Machine used by the installation PROIV version 9 now uses Java 8.
- **\_proiv\_system\_db** – a directory containing two databases, one for the lexicon and one for statistics. This is an internal database for statistics and lexicon. It should not be modified by anything other than the tools provided. It is not used to hold any application source and cannot be used as a file type for PROIV.
- **\_PROIV Version 9\_** - a directory containing the uninstaller for the product
- **installerlogs** – a directory with the log file created by the installer; if you have problems with installation then it is a good idea to send this into support if you need to report an issue
- **VirtualMachine** – the PROIV VM and bootstraps
- **ApplicationServices** – a configuration instance of Jetty which serves Gateway and Web Services

- ClientServices – a configuration instance of Jetty which serves OpenClient and Aurora
- SystemServices – a configuration instance of Jetty which serves The Dashboard, Statistics and Virtual Machine Configuration
- LicenceServices – a configuration instance of Jetty which serves the configuration for the license server.

It is important to understand that there are multiple web application contexts created within each Jetty based web application server instance.

### 3.3.2 Differences Between Version 9 Binary Install and RPM Install

On Linux the binary installer will by default install PROIV into the /opt/northgatearinfo/proiv\_version\_9 directory; it also allows the user to customize the installation by changing ports, enabling external databases and setting passwords for the web applications.

The RPM installer is very different; it is not relocatable and installs the PROIV packages to a specific location of /opt/zellis/proiv/9. It also does not offer any customization of listening ports, admin usernames / password or configuration of external databases. For instructions on how to reconfigure these options refers to the installation guide.

The installation comprises the following directories:

```
Administrator
AnalyticServices
ApplicationServices
ClientServices
Developer
_jetty
LicenceServices
_proiv_system_db
SystemServices
virtual_machine
```

These are the same as the standard Version 9 install with the exception that the bootstraps are no longer found in the virtual\_machine folder which only contains the executables and libraries required for execution. Developer and Administrator have been put into new separate folders as they are standalone PROIV applications just in the same way as any other application.

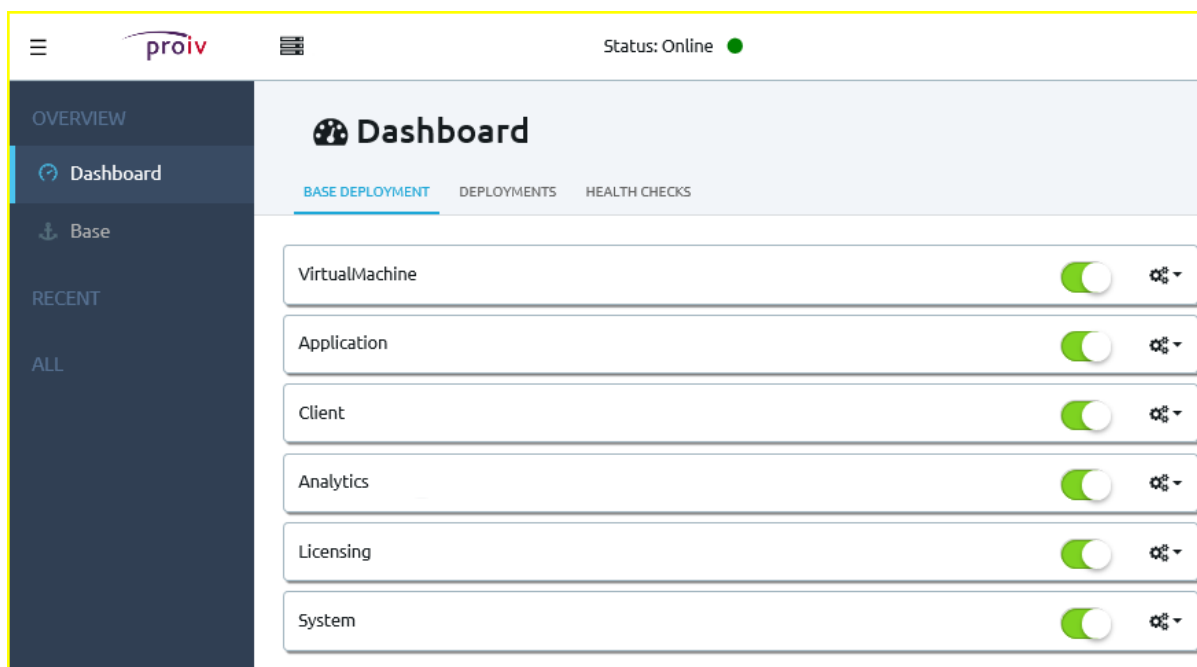
These two folders contain the bootstraps; images, xsl transforms etc which are required for execution of the application in that folder. The configuration file has been created accordingly to reference them.

The RPM installer also supports upgrade in the same way as the binary installer; the upgrade process is documented in the Installation Guide.

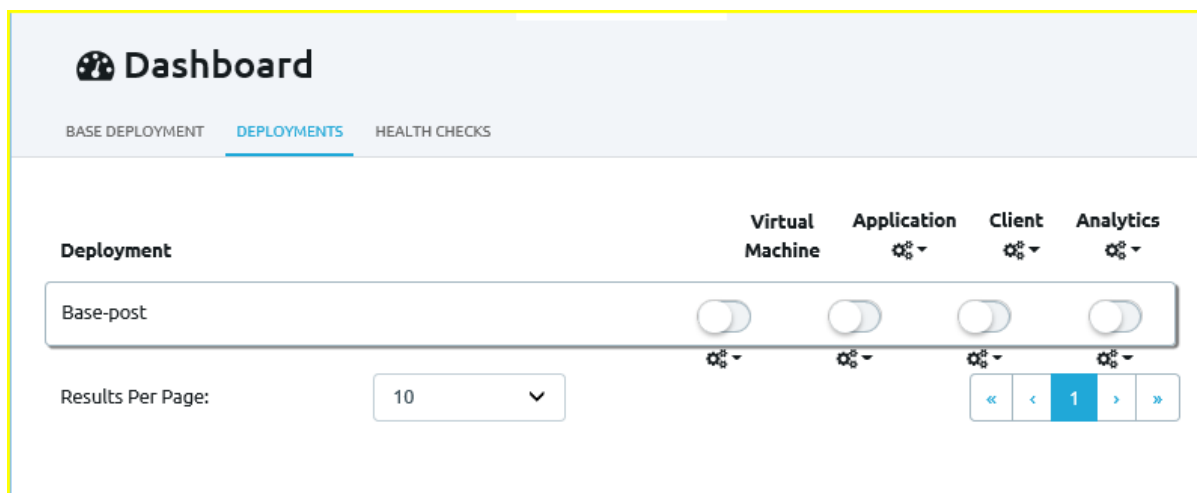
## 3.4 New PROIV V9 Dashboard

The new PROIV Dashboard replaces the Version 8 Control Panel and several other disparate means of configuring your system. It also allows you to deploy multiple


configurations and environments across your enterprise and to check the status of these running deployments. The following screen shot shows the entry screen of the dashboard with the deployment state of each service within the default configuration.



The Deployments tab shows the deployment status of all configurations derived from the base deployment. In the screen shot below the deployment id of Base-post is shown indicating that none of the components are currently deployed for this configuration.



The third tab shows the cause and number of various failures that are detected. This screen also allows you to manage these failures by dismissing the alerts and making changes to the settings; e.g. enabling an smtp server to configure the format and recipients of emails and notifying an administrator of a health check event.



## Dashboard

[BASE DEPLOYMENT](#)
[DEPLOYMENTS](#)
[HEALTH CHECKS](#)

Refresh Data
Dismiss All
Dismiss Selected Alerts
Settings

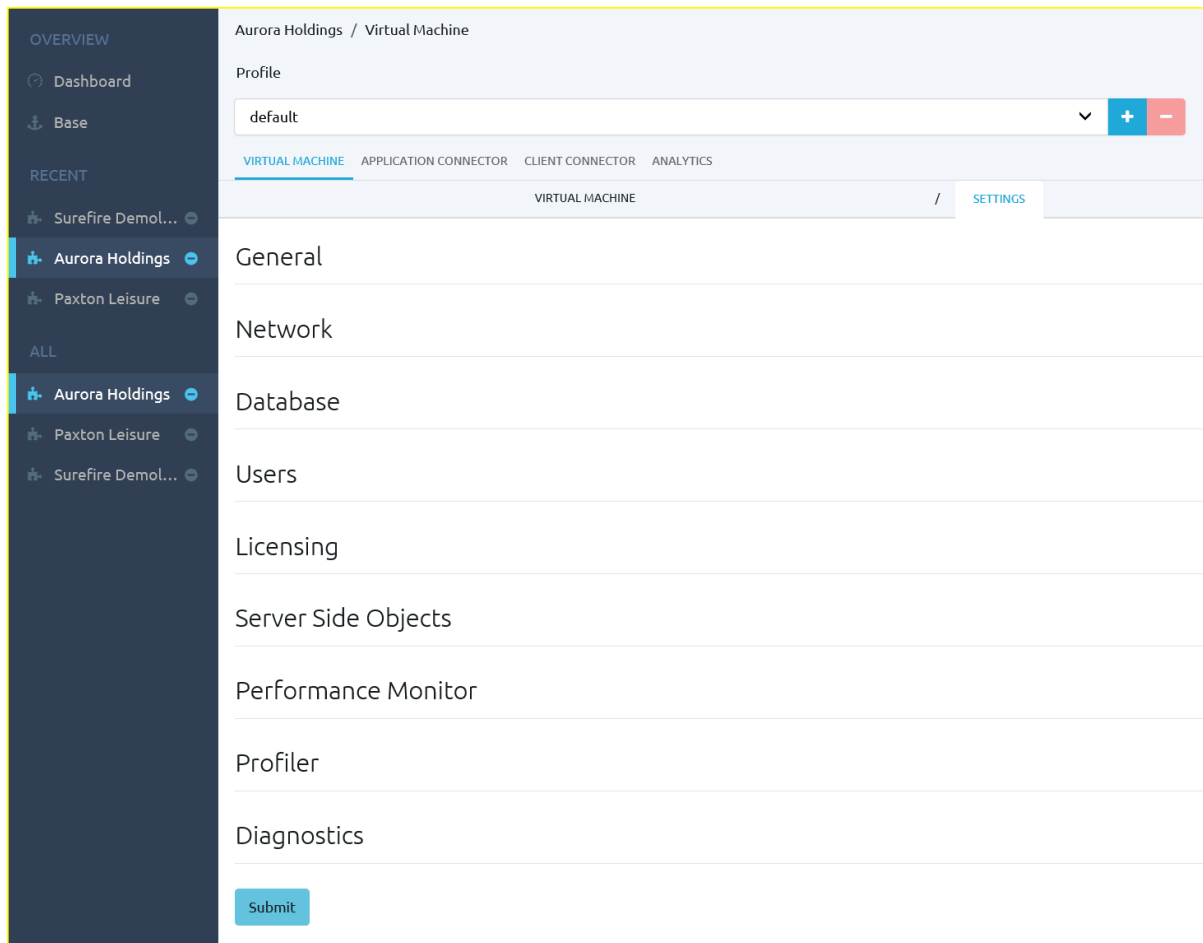
Results per Page: 5

Sort Order: First Fail Date (Asc)

DeploymentID	Component	First Fail Date	Last Fail Date	Restored Date	Count	Failure Log	Select
Base	VirtualMachine	07/09/2018 14:00:33	07/09/2018 14:30:38	01/01/1970 00:00:00	14	Fail - Response Code:Connection refused (Connection refused)	<input type="checkbox"/>
Base	Client	07/09/2018 14:00:37	07/09/2018 14:30:38	01/01/1970 00:00:00	7	Fail - Response Code:404	<input type="checkbox"/>
Base	Application	07/09/2018 14:05:38	07/09/2018 14:30:38	01/01/1970 00:00:00	6	Fail - ConnectorHealth - Task execute failed: Connection refused (Connection refused)	<input type="checkbox"/>

«
<
1
>
»

The right-hand pane of the dashboard allows you to select the configurations you have set up to modify them.



Once selected navigate to the various components and sections to view the available settings

General

Network

Database

**Default Database**

PROPATH\*

PRODATA\*

Enable Rollback ☐

Ignore Alternate Indices ☐

**Driver**

**General Database Settings**

Display Lock Message ☐

Display Error Message ☐

Cursors

Timeout

**Oracle Configuration**

OCI8 Cache

Enable Warnings As Error ☒

When all is done click the submit button at the bottom of the page.

The Operations tab allows you to access Demos and features like the Open Client connection URLs:

Profile

default

VIRTUAL MACHINE

APPLICATION CONNECTOR

CLIENT CONNECTOR

ANALYTICS

APPLICATION CONNECTOR

SETTINGS

OPERATIONS

The health status of Application Connector is either unhealthy or unknown. This may affect any operations performed below.

RESTful Web Services Demo

RESTful Web Services Test

**PROIV Demo Service** PROIV demo service

Use secure protocol: ☐

**POST** /tu\_item Task: TK\_RWS\_TulitemAdd

**GET** /tu\_item Task: TK\_RWS\_TulitemGet

**DELETE** /tu\_item Task: TK\_RWS\_TulitemDelete

**PUT** /tu\_item Task: TK\_RWS\_TulitemUpdate

SOAP WSDL

Select one of the available web services below:

Name	Description
Demo Web Service	A demo web service

Results Per Page:

<

1

>

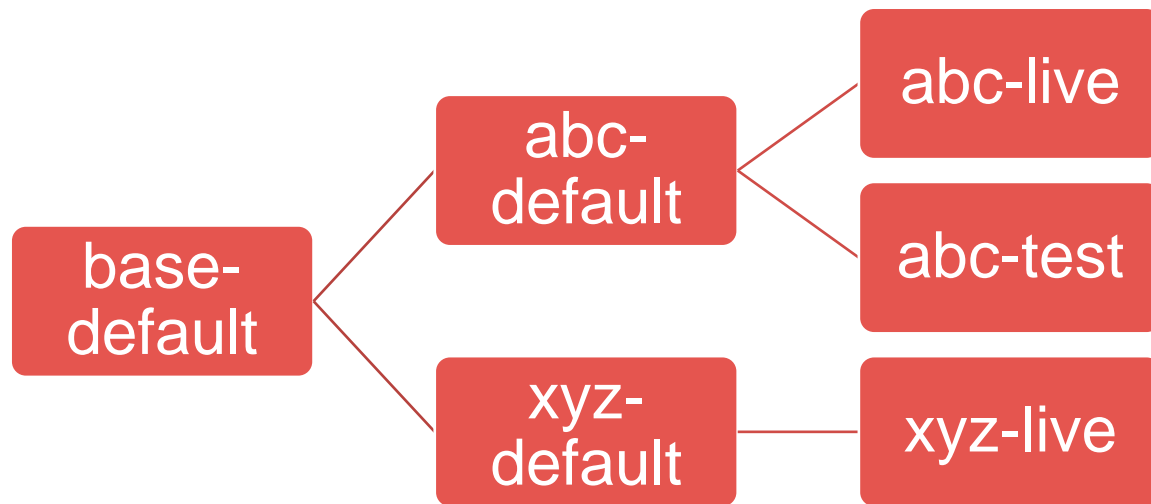


When you have configured the given deployment, you need to deploy it to the PROIV Server. Navigate to the Deployments tab on the main PROIV Dashboard. If the configuration is already deployed indicated by green buttons, then it will need to be undeployed first by clicking on the buttons. Then the new configuration can be deployed by clicking on the buttons again, turning the configuration green. The following screen shows various deployments with some components deployed for each configuration (green) and others not (grey)

Dashboard				
<a href="#">BASE DEPLOYMENT</a> <a href="#">DEPLOYMENTS</a> <a href="#">HEALTH CHECKS</a>				
Deployment	Virtual Machine	Application	Client	Analytics
abc				
abcdefghijklmnopqrstuvwxyz0123456789aaaaaaaaabbbbbbbcccc				
def				
def-live				
def-test				
xyz				
Results Per Page:	10			

Note that there are two configurations shown with the prefix def. One test and one live. These suffixes come from the selected Profile for a configuration which allow you to make configurations for various environments such as live and test in this case.

Note: All configurations are initially based upon the base-default configuration and profile combination. When you choose a new profile, it will inherit from the default profile of the current selected deployment. If you create live and test profiles they will both be available under the selected deployment and will inherit from the default profile of that deployment.



### 3.5 Connecting to PROIV

There are three ways to connect to the PROIV Virtual Machine:

- Legacy Green Screen
- Classic MFC Client
- OpenClient / Aurora

On UNIX platforms the PROIV Virtual Machine may be started with the **runproiv** script as per V8. In addition, the **pro** command in this script can be modified to provide the configuration id with the following syntax:

```
-c <config-id>
```

e.g. if “zellis” was a deployed configuration:

```
-c zellis-default
```

In the above example the `virtual_machine/config` sub folder will contain a file called:

```
zellis-default.properties
```

On Windows the default port for the Client VM server has changed to 9023 and the default port for the Gateway VM Server is now 9833. Changing these should only be done via the base properties on Windows as the Client and Gateway VM services will need to be restarted to use them.

### 3.5.1 PROIV Servers

V9 has a number of services which need to be started on your system.

On Windows these can be found in the windows Service Manager and can be started / stopped as per previous releases via the Services Management Console application.

On Unix there are shell scripts in each of the following directories to start and stop the server instances.

```
$PROIV_HOME/ApplicationServices/bin
```

```
$PROIV_HOME/ClientServices/bin
```

```
$PROIV_HOME/SystemServices/bin
```

```
$PROIV_HOME/LicenseServices/bin
```

```
$PROIV_HOME/AnalyticServices/bin
```

## 3.6 Co-existence with earlier versions of PROIV

### 3.6.1 Windows Platforms

Version 9 (client and servers) can coexist with Version 8 on the same operating system instance; the servers utilize different listening ports. PRO-ISAM locks will also be shared between versions, however it is important to ensure that file definitions match otherwise there will be unexpected behavior.

### 3.6.2 Unix Platforms

You can install PROIV Version 9 on the same system as PROIV Version 8; although it should be noted that some of the pre-requisites (e.g. Java version) for version 9 are different to version 8.

## 4 Component specific Information

### 4.1 Virtual Machine

The Virtual Machine has not changed in version 9.1

### 4.2 Client Connector

#### 4.2.1 Aurora

##### 4.2.1.1 URL To Access Aurora

The URL to access Aurora depends on the port number provided during the installation of PROIV. The default port number is 9804 and the full URL is:

<http://<host>:9804/base-default/aurora>

Where <host> is the fully qualified domain name of the server on which you have installed PROIV.

##### 4.2.1.2 Updates to Aurora Configuration on Unix

Once you have installed version 9.0 on UNIX, you will need to make some further configuration changes to allow PROIV Aurora to function.

Using the PROIV Dashboard navigate to the Aurora Client Configuration area within the Client Connector configuration tab; in the VM Connections/Aurora panel enter a username and password which will successfully log into the Unix host.

The screenshot shows the 'VM Connections' configuration interface. On the left, a tree view shows 'VM Connections' expanded, with 'Default' and 'Aurora' sub-items. The 'Aurora' item is selected. The main area contains a form with the following fields:

Field	Value
Name*	Aurora
Description	VM connection that uses the Aurora transparent log in
Host	PC40722.uk.rebushr.com
Port	9023
Username	Aurora
Password	.....

Also, ensure that this user can connect to either an OpenClient session or an MFC Client session by running the **runproiv.sh** script which was created during the installation process. If required, update the prompts specified to allow processing of the Unix login.

base / Client Connector

Profile

default

VIRTUAL MACHINE APPLICATION CONNECTOR **CLIENT CONNECTOR** ANALYTICS LICENSING SYSTEM DATABASE LEXICON

CLIENT CONNECTOR / **SETTINGS** OPERATIONS

### VM Connections

- VM Connections
  - Default
  - Aurora
    - Unix Prompt Connection Properties**

#### Unix Prompt Connection Properties

Username*	ogin:
Password*	assword:
Success*	\$
Failure*	ncorrect

When configuring Aurora, it is important to ensure that the Document Domain and Host Machine are the same otherwise Aurora will not successfully launch tabs within the framework.

## 4.3 Application Connector

Application Connector has no differences over 9.0

## 4.4 Analytics

Analytics has no differences over 9.0

## 4.5 Licensing

Licensing has no differences over 9.0

## 4.6 Dashboard (zbd, lex, systemdb)

The v9.1 PROIV Dashboard has had a number of usability improvements since v9.0. This should make it clearer to the user whether a given configuration has been deployed following creation or modification.

## 5 Platform and Database specific Information

### 5.1 64-bit Linux

#### 5.1.1 Supported Java Runtime Environments

PROIV on 64-bit Linux supports the Oracle Java 8 Runtime Environment. On this platform, the installation process will look in the following directories (as defined using regular expression) for an Oracle JRE.

/usr/*[jJ][rR][eE]*1*8*	/usr/*[jJ][aA][vV][aA]*8*	/opt/*[jJ][sS][Ee]*/jre
/opt/*[jJ][rR][eE]*1*8*	/opt/*[jJ][aA][vV][aA]*8*	/opt/*[jJ][rR][Ee]*
/usr/*[jJ][aA][vV][aA]*1*8*	/usr/*[jJ][sS][Ee]*	/usr/*[jJ][rR][eE]*
/opt/*[jJ][aA][vV][aA]*1*8*	/usr/*[jJ][sS][Ee]*/jre	/opt/*[jJ][rR][eE]*
/usr/*[jJ][rR][eE]*8*	/usr/*[jJ][rR][Ee]*	/usr/*[jJ][aA][vV][aA]*
/opt/*[jJ][rR][eE]*8*	/opt/*[jJ][sS][Ee]*	/opt/*[jJ][aA][vV][aA]*
/usr/*[jJ][aA][vV][aA]*/*[jJ]*	/opt/*[jJ][aA][vV][aA]*/*[jJ]*	/opt/*[jJ]*
/usr/*[jJ]*	/usr/jre1.8.0	/usr/local/jre1.8.0
/usr/java/jre1.8.0	/opt/jre1.8	/opt/jre1.8.0
/usr/jre8.0	/usr/local/jre8.0	/usr/java/jre8.0
/opt/jre8	/usr/jre8	/usr/local/jre8
/usr/java/jre8		

#### 5.1.2 PostgreSQL

The reliance of the PostgreSQL database solution, in PROIV v9.0, on the ODBC layer has been removed. The solution now makes use of native PostgreSQL database drivers and is much easier to configure. The drivers required by PROIV on the Linux platform can be found in the following directory which is included in the LD\_LIBRARY\_PATH environment variable in the runproiv script:

\$PROIV\_HOME/virtual\_machine/lib

#### 5.1.3 Oracle

The Linux platform includes the Oracle 12c Instant client, it can be found in the directory of your installation as shown below. This directory is added to the LD\_LIBRARY\_PATH environment variable as part of the **runproiv** script.

\$PROIV\_HOME/virtual\_machine/lib/instant\_client

#### 5.1.4 MySQL

The Linux 64-bit includes MySQL - Connector/C Library "libmysqlclient.so" which can be found in the directory of your installation as shown below. This directory is added to the LD\_LIBRARY\_PATH environment variable as part of the **runproiv** script.

\$PROIV\_HOME/virtual\_machine/lib/mysql\_conn4c

#### 5.1.5 RPM Installation

The RPM installation requires the jq utility found in the Linux Extended Package Library; it is necessary to install the library as a yum repo using the following command.

```
[root@locallinux]# yum install epel-release
```

Once the repo is installed you can install the jq utility using the command

```
[root@locallinux]# yum install jq
```

## 5.2 Solaris

This release is supported on Solaris 10 (minimum release is Solaris 10 1/13) and Solaris 11. It is very important that the operating system has all vendor-supplied patches installed. **Note:** The Reality database is no longer supported on this platform.

### 5.2.1 Supported Java Runtime Environments

PROIV on 64-bit Solaris supports the Oracle Java 7 and Java 8 Runtime Environments on the Solaris platform. The installation process initially refers to the JRE path that is set in the JAVA\_HOME variable; in case not found, it looks in the following directories (as defined using regular expression) for an Oracle JRE 8 before JRE7 and will use it in preference as it is located.

/usr/*[jJ][rR][eE]*1*8*	usr/jre1.8.0	/usr/*[jJ][dD][kK]*1*8*
/opt/*[jJ][rR][eE]*1*8*	/usr/*[jJ][rR][eE]*1*8*0*	/opt/*[jJ][dD][kK]*1*8*
/usr/*[jJ][aA][vV][aA]*1*8*	/opt/*[jJ][rR][eE]*1*8*0*	/usr/*[jJ][dD][kK]*1*8*/jre
/opt/*[jJ][aA][vV][aA]*1*8*	/usr/*[jJ][aA][vV][aA]*1*8*0*	/opt/*[jJ][dD][kK]*1*8*/jre
/usr/*[jJ][sS][Ee]*	/opt/*[jJ][aA][vV][aA]*1*8*0*	/usr/*[jJ][aA][vV][aA]*1*8*
/usr/*[jJ][sS][Ee]*/jre	/usr/*[jJ][rR][eE]*8*0*	/opt/*[jJ][aA][vV][aA]*1*8*
/usr/*[jJ][rR][Ee]*	/opt/*[jJ][rR][eE]*8*0*	/usr/*[jJ][sS][Ee]*
/opt/*[jJ][sS][Ee]*	/usr/*[jJ][aA][vV][aA]*8*0*	/usr/*[jJ][sS][Ee]*/jre
/opt/*[jJ][sS][Ee]*/jre	/opt/*[jJ][aA][vV][aA]*8*0*	/opt/*[jJ][sS][Ee]*
/opt/*[jJ][rR][Ee]*	/usr/*[jJ][rR][eE]*8*	/opt/*[jJ][sS][Ee]*/jre
/usr/*[jJ][rR][eE]*	/opt/*[jJ][rR][eE]*8*	/usr/*[jJ][dD][kK]*/jre
/opt/*[jJ][rR][eE]*	/usr/*[jJ][aA][vV][aA]*8*	/opt/*[jJ][dD][kK]*/jre
/usr/*[jJ][aA][vV][aA]*	/opt/*[jJ][aA][vV][aA]*8*	/usr/*[jJ][dD][kK]*
/opt/*[jJ][aA][vV][aA]*	/usr/*[jJ][sS][Ee]*	/opt/*[jJ][dD][kK]*
/usr/*[jJ][aA][vV][aA]*/[jJ]*	/usr/*[jJ][sS][Ee]*/jre	/usr/*[jJ][aA][vV][aA]*
/opt/*[jJ][aA][vV][aA]*/[jJ]*	/usr/*[jJ][rR][Ee]*	/opt/*[jJ][aA][vV][aA]*
/opt/*[jJ]*	/opt/*[jJ][sS][Ee]*	/usr/*[jJ][aA][vV][aA]*/[jJ]*
/usr/*[jJ]*	/opt/*[jJ][sS][Ee]*/jre	/opt/*[jJ][aA][vV][aA]*/[jJ]*
	/opt/*[jJ][rR][Ee]*	/opt/*[jJ]*
	/usr/*[jJ][rR][eE]*	/usr/*[jJ]*
	/opt/*[jJ][rR][eE]*	
	/usr/*[jJ][aA][vV][aA]*	
	/opt/*[jJ][aA][vV][aA]*	
	/usr/*[jJ][aA][vV][aA]*/[jJ]*	
	/opt/*[jJ][aA][vV][aA]*/[jJ]*	

## 5.2.2 Oracle

The Solaris platform includes the Oracle 12c Instant client, it can be found in the \$PROIV\_HOME/virtual\_machine/lib/instant\_client directory of your installation. This directory is added to the LD\_LIBRARY\_PATH environment variable as part of the runproiv script.

## 5.3 AIX

This release is supported on AIX 7.1. It is very important that the operating system has all vendor-supplied patches installed. See the Supported Platforms section for the currently supported Technology levels.

### 5.3.1 Supported Java Runtime Environments

PROIV on 64-bit AIX supports Java 8 Runtime Environments. The installation process initially refers to the JRE path that is set in the JAVA\_HOME variable; in case not found, it looks in the following directories (as defined using a regular expression) for an Oracle JRE 8 and will use it in preference as it is found.

/usr/*[jJ][rR][eE]*1*8*
/opt/*[jJ][rR][eE]*1*8*
/usr/*[jJ][dD][kK]*1*8*/jre
/opt/*[jJ][dD][kK]*1*8*/jre
/usr/*[jJ][aA][vV][aA]*1*8*
/opt/*[jJ][aA][vV][aA]*1*8*
/usr/*[jJ]2[sS][Ee]*
/usr/*[jJ]2[sS][Ee]*/jre
/usr/*[jJ]2[rR][Ee]*
/opt/*[jJ]2[sS][Ee]*
/opt/*[jJ]2[sS][Ee]*/jre
/opt/*[jJ]2[rR][Ee]*
/usr/*[jJ][dD][kK]*/jre
/opt/*[jJ][dD][kK]*/jre
/usr/*[jJ][dD][kK]*
/opt/*[jJ][dD][kK]*
/usr/*[jJ][rR][eE]*
/opt/*[jJ][rR][eE]*
/usr/*[jJ][aA][vV][aA]*
/opt/*[jJ][aA][vV][aA]*
/usr/*[jJ][aA][vV][aA]/*[jJ]2*
/opt/*[jJ][aA][vV][aA]/*[jJ]2*
/opt/*[jJ]2*
/usr/*[jJ]2*
/opt/java1.8
/opt/java1.8/jre

### 5.3.2 Oracle

The AIX platform includes the Oracle 12c Instant client, it can be found in the \$PROIV\_HOME/virtual\_machine/lib/instant\_client directory of your installation. This directory is added to the LD\_LIBRARY\_PATH environment variable as part of the **runproiv.sh** script.



Oracle may generate a warning return code “ORA-24347” when NULL columns are used in aggregate functions. This happens for all PROIV V8 and V9 versions. PROIV regards the warning as an error and rolls back the transaction. Within PROIV, this is only likely to happen with full function SQL.

You can instruct PROIV to ignore the Oracle warning by disabling the Enable Warnings As Error switch in the Oracle section of the Virtual Machine configuration in the PROIV Dashboard.

## **5.4 Operating System Authentication to connect PROIV with Oracle database**

On UNIX platforms, PROIV supports user authentication to establish connection between PROIV sessions and an Oracle database. You can configure an Oracle Database to authenticate (that is, verify the identity of) users or other entities that connect to the database. Authentication must be configured in two ways, such as through the PROIV application and from the Oracle database.

On the PROIV side, the username and/or password provided in the PROIV Dashboard settings should be blank. On the Oracle database side, you must set Oracle configuration to allow OS authentication. For more information, refer to Oracle documentation.

This will not affect standard database authentication of credentials, however should problems arise it is possible to connect using the existing method by setting the OCI Simple Logon property in the PROIV Dashboard. This cannot be used with OS authentication.

## **5.5 File System Support**

PROIV is not supported on shared file systems such as SAMBA (SMB/CIFS), or NFS

## 6 Issues

### 6.1 Resolved Issues

PROIV Version 9.1R0-SR1 includes fixes for all issued fixed, in all versions, up to and including PROIV version 8.3R6-SR7

### 6.2 Resolved Issues for v9.1R0-SR1 (Build 9.1.6.40)

Issue No	Description	Linked Issues
PRB0041462	Licence Service fails to start after a reboot of the server	
PRB0041465*	Client.Receive completes with successful return code when transfer was not completed	
PRB0041470	Client.Receive units incorrect in Dashboard resulting in a file upload limit of 64K, value entered is now in MB (e.g. entering 5, specifies a maximum upload limit of 5MB)	
PRB0041290	Custom CSS theme files are not implemented correctly	DFCT0105338
PRB0041393	SOAP Web Service imported from version 8 fails to generate WSDL	

\* Note, as a result of this change, that Client.Receive may now report errors that were not previously reported.

### 6.3 Resolved Issues for v9.1R0 (Build 9.1.6.29)

Issue No	Description	Linked Issues
DFCT0101930	REST Web Services Import not working	
DFCT0102315	Unable to upload License File on Linux Operating System	
DFCT0103191	Images do not load from custom resource folder	
DFCT0102250	MFC not saving server port number in session properties	
DFCT0103703	First log in for licensing fails in PROIV Dashboard	
DFCT0101834	Installation sometimes hangs on Unix operating systems	
DFCT0101218	Open Client paging screen automatically adds 999 empty records until the error message "Maximum Paging sequence Number Exceeded" appears	
DFCT0099950	Documentation update for file format limitations on background wallpapers.	
DFCT0101077	REST SSO fails to send Unicode string to a web service implemented with dot Net	
DFCT0100261	Open Client session closes when try to copy multiple rows of data from Microsoft Excel	
DFCT0100734	Unicode characters do not display in RESTful Web Services	
DFCT0101238	Horizontal Scroll Bar appears in Paging Area when not enabled in Open Client	

DFCT0098903	Horizontal scrollbar not displaying in a Listbox after reloading when Remember Settings flag checked	
DFCT0103288	Open Client fails to re-focus the current field following Mouse Over event on another	
DFCT0100638	No CDATA wrapping on XML report when data contains control characters such as line feeds or carriage returns	

## 6.4 Known Issues

The new Health Check feature does not work on the Microsoft Windows Edge browser in early versions of Windows 10. This is due to a known issue in the Edge Browser which was corrected in the revised October 2018 Release of the Windows 10 operating system, version 1809.

Web Help fails to render some images correctly. This is due to file names contained in a WAR file being in mixed case and will be corrected in a future release. (Ref: ZB-1630)

Swapping between secure and in-secure protocols may in certain browsers cause connection issues (e.g. "404 Error" messages). This is due to an http header security feature that is designed to combat session hijacking and eavesdropping by third parties. The error can be overcome by clearing session cookies from the browser cache or waiting for the secure session to time out. It is however, recommended that https is used for all browser-based client connections as this will be more secure and will also resolve this issue.

There is an issue with custom CSS when upgrading from a previous version 9 release to this service release. The upgrade process overwrites the Client Services War file which contains the customized CSS, so it is recommended that you save this file prior to the upgrade and then use it to replace the one in the upgraded installation when it is complete.

The Zellis logo features the word "zellis" in a bold, dark blue, sans-serif font. A red triangle is positioned above the "i", pointing towards the top right corner of the page. The logo is set against a light gray background that forms a large triangle pointing towards the bottom left corner of the page.

# zellis

**For further information please  
visit [zellis.com](https://zellis.com)**

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