Release Notes

Prospect® 8.0

Lucent UMTS 6.0.9.3.0 (RP9.3)



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1 Description

Prospect® 8.0 for Lucent UMTS RP9.3 is an upgrade release.

The Prospect® 8.0 for Lucent UMTS RP9.3 release adds support for two new file types, LNG and LMRS, within the CallServer module. Support has also been added for CallServer M6.0 data as well as for some new counters, as detailed in the New Features section.

- The Prospect Base version certified against this release 8.0.6.0 with core fix pack 8.0.6.3 or any later version.
- The client version certified against this release is 8.0.6.
- The operating system versions certified against this release is Solaris 10.
- The Oracle database version certified against this release is Oracle 10g 10.2.0.4 64-bit.

The latest core fix pack for Prospect Base is available for download from the following URL:

http://www-01.ibm.com/software/sysmgmt/products/support/Prospect.html

The following publication is included with this release.

Publication	File Name	Revision Date
Prospect Performance Data Reference	PerfDataRef.pdf	23 rd June 2009

To verify that you have the correct version of the Prospect® publications, see the revision date in the *About this Documentation* section of any guide or Help file.

Note: All the user publications can be downloaded from Prospect Advantage web site.

2 Supported Platforms

Complete platform support information for the current release is in the *Prospect Server Preparation Guide*. Complete client hardware and software requirements are in the *Prospect Installation Guide*.

Already Supported Vendor Software
Lucent UMTS RAN 03.01 (including XML Bulk CM file), 03.03.03, 04.03, R5.0, r5.1
Lucent UMTS SGSN 03.03.03, 04.01
Lucent UMTS Call Server 03.03.03, 04.01/R13, 04.04/R14, 04.04.02/R14
LucComExtra – based on SOW14 & SOW15 architecture & design document
Lucent UMTS Call Server M5.0

Newly Supported Vendor Software
Lucent UMTS LMRS R16, R18
Lucent UMTS LNG R16, 18
Lucent UMTS Call Server M6.0

3 New Features

In this release, Prospect® adds support for a number of new counter groups and file types. Please refer to the accompanying *Performance Data Reference* publication for the exact counter details.

3.1 Support for new file type - LNG

Support has been added for the LNG file type within the CallServer module, and the corresponding ftpIN directory is \$PROSPECT_HOME/../ftpIN/LNG/in.

Entity	Counter Status	Remark
LNG	New counters: 14	New entity
LNG_Ethernet	New counters: 2	New entity
LNG_Ethernet_SP	New counters: 5	New entity
LNG_Network_Element	New counters: 9	New entity
LNG_VCC_EndPoint	New counters: 1	New entity

3.2 Support for new file type - LMRS

Support has been added for the LMRS file type within the CallServer module, and the corresponding ftpIN directory is \$PROSPECT_HOME/../ftpIN/LMRS/in.

Entity	Counter Status	Remark
LMRS	New counters: 0	New entity
LMRS_Resource_Pool	New counters: 10	New entity
LMRS_Partition	New counters: 7	New entity
LMRS_CPU	New counters: 11	New entity
LMRS_Host	New counters: 7	New entity

3.3 CallServer M6

Support has been added for the CallServer M6.0 release.

Entity	Counter Status Remark	
CG_MGW_ErrorCode	New counters: 2	New entity
ChannelGroup_MGW	New counters: 2	Existing entity
SigPoint_TCAP	New counters: 5	Existing entity
ServiceMember	New counters: 66	Existing entity
BSC_BearerType	New counters: 2	New entity
BSC_CS	New counters: 0	New entity
ChannelGroup	New counters: 4	Existing entity
IN_Service	New counters: 3	Existing entity
MI_MsgsClass	New counters: 3	New entity
MI_SNEType	New counters: 1	New entity

Entity	Counter Status	Remark
RNC_SM_CS	New counters: 4	Existing entity

3.4 SS7 Device

Additional SS7 PEG counters are supported on the ServiceMember entity (MR0410096023).

Entity	Counter Status	Remark
ServiceMember	New counters: 8	Existing entity

3.5 Reserved Counters

Support is added for 30 RESERVED counters. These are split across the RNC and UtranCell entities.

Entity	Counter Status	Remark
RNC	New counters: 10	Existing entity
UtranCell	New counters: 20	Existing entity

4 Resolved Issues

Following is a list of problems present in the previous release that have been resolved.

CQ / PMR or APAR	Sev	Description
valnt00082909 / IZ48060	3	GET INCONSISTENT RESULTS FROM REPORT WITH SINGLE PEGCOUNT
Valnt00079653/ IZ44859	2	RP9.1 P10 THE CORRESPONDING ENTRIES FOR UTRANCM AND RNC_MATRIXPMARE MISSING FROM WML_LOAD_TABLES.
valnt00081440 / IZ46906	2	RP9.2 INSTALLATION REVERTED BACK WM_CS_SM_FIND_INSTANCE() TO VERSION PRIOR TO THE FIX IN RP9.1PATCH10
valnt00085564 / IZ49460	3	COUNTERS ATTPAGEREQRNC AND SUCCPAGEREQRNC FOR ALL CALLSERVERRELEASES ARE NOT LOADING SINCE RP9.2 UPGRADE (APAR=)
valnt00087486 / IZ51235	3	FIELD LABEL INCORRECT
valnt00085572 / IZ49461	2	ALU RELEASE 16.28.00.03 (M5) CALLSERVER LAC COUNTER,SUCCPAGEREQSPERLOCATIONAREA IS NOT LOADING IN THE RP9.2 UPGRADE
valnt00084932 / MR0327092523	3	Support Lucent UMTS production RNCpm counter - VS.MM.PagAttDiscard.sum

5 Known Problems

DDTS / SRS	Description
SEAde36042	SMTP Configuration for E-Mail Event Notifications
SEAde58948/32662	Fields for which "show" button set off in template are not shown in regular output but do show on graph(should not)
SEAde68341	Execution 'Add_filetype_timeout.sh all' script throws error
SEAde69522	Scenario activation time reset back to default after core upgrade
SEAde69563	part_mask.sh not allow to add pattern '0000000'
SEAde69660	Unwanted pattern generated if part_mask.sh run with –R option
SEAde64290	Some of the options in \$FLEXPM_HOME/scripts/run-sentry are not functioning
SEAde70024	Issues found in Server Prep Guide
SEAde41935	Some Event Notifications are not Triggered
SEAde41961	Stored Busy Hour Reports Fail for Last Interval of the Day
SEAde63714/37476	DA tool in report editor returning inconsistent info
SEAde56121	Client Hangs When Saving Report Definitions After Altering Split Key Configuration
SEAde56150	Report Group Schedule Time Changes when Altering the Time Zone
SEAde56234	Export and Import of Templates and Reports can Fail
SEAde56257	Flexible Start of Week Reporting can Cause Differences between Stored and Non-Stored Reports
SEAde58885	Error found in CallServer0302 loader.log
valnt00051620	Server Prep needs update
valnt00051564	Missing parameters in wm_system_values_v

5.1 SMTP Configuration for E-Mail Event Notifications [SEAde36042]

<u>Description</u>: If the <code>configure-smtp.sh</code> script is run and an invalid SMTP server/option is specified, then the event handler can take a long time to process events (email notification section).

<u>Impact</u>: If this is subsequently fixed and the event handler is restarted, then a flood of emails could be sent if there are many unhandled events in the database.

Workaround: None

5.2 Fields for which the "show" button is set off in template are not shown in regular output but do show on graph (should not) [SEAde58948]

<u>Description</u>: In the report result, the fields with "show" attribute set off should not be displayed in the Excel report both in values and also in graph.

Actual Results:

The fields for which the "show" button set off are not shown in the report values but are shown in the graph.

Impact: Report and graph show different results.

Workaround: Report is correct.

5.3 Executing 'add_filetype_timeout.sh all' script throws error [SEAde68341]

<u>Description</u>: Running add_filetype_timeout.sh all, then changing the default timeout value using override_default_timeout.sh -f < file type> -t <timeout to override> and running add_filetype_timeout.sh once again gives Oracle errors.

Impact: Oracle errors occur.

<u>Workaround</u>: It is not recommended to run the script. Please refer to *Useful Hints* for more information.

5.4 Scenario activation time is reset to the default after a core upgrade [SEAde69522]

<u>Description</u>: The scenario activation time is reset to default run time, ie. 01:00 daily after a core upgrade.

<u>Impact</u>: Scenario activation run time changes if it was set to a time other than the default one.

Workaround: Run the following command to change it back to customized time:

\$ schedule maint scenario activation <YYYYMMDD> <HHMI>

5.5 part_mask.sh does not allow pattern '0000000' [SEAde69563]

<u>Description</u>: Running the command part_mask.sh with pattern '0000000' would output an error 'The pattern "0000000" is invalid'. But command usage gives valid example of this pattern.

Impact: No impact.

Workaround: Don't run the command with pattern '0000000'.

5.6 Unwanted pattern generated if part_mask.sh run with –R option [SEAde69660]

<u>Description</u>: If part_mask.sh script is run with the -R option, the previous part_mask pattern for particular table will be updated to '1000000'.

Impact: Run part_mask.sh with -R option would result unwanted pattern.

Workaround: Don't run the command with -R option.

5.7 Some of the options in \$FLEXPM_HOME/scripts/run-sentry are not functioning [SEAde64290]

<u>Description</u>: Some of the options to run-sentry may not work properly. E.g. run-sentry logs.

<u>Impact</u>: run-sentry does not scan through the log directory and does not return the correct results for some commands.

Workaround: None.

5.8 Issues found in Server Prep Guide [SEAde70024]

<u>Description</u>: At section A.3 <u>Install Oracle Patches</u> & 6.1.5 <u>Install Oracle10g Patches</u>, some of the file name is given as "10gr2_companion_sol_cpio.gz"

Impact: filename is not correct.

<u>Workaround</u>: The file name should be 10gr2_companion_sol.cpio.gz, not 10gr2_companion_sol_cpio.gz.

5.9 Some Event Notifications are not Triggered [SEAde41935]

Description: The busy hour clean success event notification is not triggered.

Impact: E-mail event notification functionality is not complete.

Workaround: None.

5.10 Stored Busy Hour Reports Fail for Last Interval of the Day [SEAde41961]

<u>Description</u>: Stored busy hour reports fail for the last interval of the day (23:45). This is observed for the entity Interface and might be an issue for other entities as well. The non stored busy hour report works correctly.

Impact: Stored busy hour reports fail for the last interval of the day (23:45).

<u>Workaround</u>: None. Users can use the Non-Stored Busy Hour report for specific cases.

5.11 DA tool in report editor returning inconsistent info [SEAde63714]

<u>Description</u>: DA tool in report editor is sometimes inaccurate.

Impact: Inconsistent information.

Workaround: None.

5.12 Client Hangs when Saving Report Definitions after Altering Split Key Configuration [SEAde56121]

<u>Description</u>: The client might hang if you open a report definition, which has APPLY TO ALL ROWS and HIDE KEY COLUMN selected on the FORMAT tab, and then you save the report definition after clearing only one of these options. Changes to the report definition will not be saved.

Impact: Client might hang when saving report definition.

<u>Workaround</u>: End the client process with Windows TASK MANAGER. Restart the client and open the report. Clear both APPLY TO ALL ROWS and HIDE KEY COLUMN selected on the FORMAT tab. Save and exit the report.

5.13 Report Group Schedule Time Changes when Altering the Time Zone [SEAde56150]

<u>Description</u>: Report groups are scheduled using the REPORT GROUP SCHEDULE EDITOR. The editor allows for the altering of the time zone. If the time zone has been Copyright © International Business Machines Corporation 2009. All rights reserved.

altered when the report is saved, the STARTING AT time is offset, even if the STARTING AT time has been altered manually.

Impact: Reports are scheduled at different times than expected.

<u>Workaround</u>: After saving the report group schedule with the correct time zone, exit the editor and re-open the schedule. Adjust the STARTING AT time and re-save.

5.14 Export and Import of Templates and Reports can Fail [SEAde56234]

<u>Description</u>: Using the scripts <code>export_docs.sh</code> and <code>import_docs.sh</code> to export and import templates and reports can fail with Oracle error messages.

Impact: Reports and templates might not export and import.

Workaround: None.

5.15 Flexible Start of Week Reporting can Cause Differences between Stored and Non-Stored Reports [SEAde56257]

<u>Description</u>: A user defined start of week can be defined for each report that uses a weekly grouping. If a user defined start of week is defined, reports based on stored and non-stored data can contain different reporting periods.

Impact: Inconsistent reporting periods.

Workaround: Adjust data and time scope to get required reporting period.

5.16 Error found in CallServer0302 loader.log [SEAde58885]

<u>Description</u>: Existing pegs are moved from the ChannelGroup entity to the ChannelGroup_MGW entity in this release. These impacted pegs are not supported in ftpIN/CallServer03.

<u>Impact</u>: The data file for previous release will be supported in ftpIN/CallServer03. The data file for current release will be supported in ftpIN/CallServer0302.

Workaround: None.

5.17 Server Prep needs update [valnt00051620]

<u>Description</u>: Upgrading Oracle 9i to 10g steps on editing listener should be done by editing the listener.ora before starting the listener.

Impact: None.

Workaround: Restart listener.

5.18 Missing parameters in wm_system_values_v view [valnt00051564]

 $\underline{\textit{Description}}$: During the Fresh Install, three parameters are missing from the wm system values v view:

AutoCleanIOTMaxLoops (default value: '5')

EventTruncatePmFolderEventTable (default value:'Y')

SummationForceNI (default value: 'FALSE')

 $\underline{\textit{Impact}}$: None. Prospect will use the given default value for each parameter if it is not present in $wm_system_values_v$.

<u>Workaround</u>: However, if there is any abnormal behavior, you can add the relevant parameter(s) to wm_system_values_v with the following command in SQL*Plus:

```
exec wm_sysval.newSysValIfNotExists ('parameter-name', 'parameter-value');
For example,
```

```
exec wm_sysval.newSysValIfNotExists ('AutoCleanIOTMaxLoops', '5');
exec wm_sysval.newSysValIfNotExists ('EventTruncatePmFolderEventTable', 'Y');
exec wm_sysval.newSysValIfNotExists ('SummationForceNI', 'FALSE');
```

6 Installation and Upgrade Instructions

6.1 Prerequisites

6.1.1 Network Timeouts

If your system has a security policy in place such that a session is disconnected after a lengthy period of apparent inactivity, you should disable it during this upgrade. The upgrade can take a few hours to run and requires no user input during the majority of the upgrade. This can make the upgrade session appear idle. If timeouts are not disabled, the upgrade terminal could be disconnected during the upgrade.

6.1.2 Disk Space and Table Space Requirements

The installation of the upgrade requires additional 500 MB disk space under /u01 file system.

The install script also requires that at least 10% of total tablespace size is available for each tablespace. Please contact IBM customer support if there is less than 10% of total tablespace available for any of the tablespaces.

Additional Oracle table space is required to support the new traffic tables introduced in this release. The following lists the disk requirement for each table space assuming that 90 days of data will be retained:

TRAFFIC_LARGE: 1.5GB
TRAFFIC_MEDIUM: 200MB
TRAFFIC_SMALL: 100MB

Note: It is recommended to always keep 10% of total table space size available for each table space.

6.1.3 XDK

The Oracle Database must have XDK installed. Log into the database using SQL*Plus:

```
$ sqlplus $DB_CONNECT
```

Please use the following SQL statement to check if the XDK is installed accordingly. Oracle XDK for Java should be there in the result. The version must be 10.2.0.x.

```
SQL> SELECT comp_id, comp_name, version FROM dba_registry WHERE
comp_id = 'XML';
```

COMP_ID	COMP_NAME	VERSION
XML	Oracle XDK for Java	10.2.0.3.0

6.1.4 Perl Version

Make sure that /usr/per15/5.6.1 is on your server. Type the following command to verify:

```
$ /usr/perl5/5.6.1/bin/perl -v
```

The first line of the output should start with:

```
This is perl, v5.6.1 built ...
```

If an error is received as below, please contact system administrator to install Perl 5.6.1.

```
ksh: /usr/perl5/5.6.1/bin/perl: not found
```

Note: If the Perl version is incorrect, the installation will not proceed.

6.1.5 Java Version

Make sure that Java version 1.5.0 13 or above is installed. Type the following command:

```
$ java -version
```

The output should resemble the following:

```
java version "1.5.0_13"

Java(TM) 2 Runtime Environment, Standard Edition (build
1.5.0_13-b03)

Java HotSpot(TM) Server VM (build 1.5.0_13-b03, mixed mode)
```

Note: If the installed version is earlier than required, some scripts might not run, or might produce incorrect results.

6.1.6 Checking Environment Variables

Execute the following command to verify that the environment variables LOG and OK are NOT set:

```
$ echo $LOG $OK
$ <- default setting should be empty</pre>
```

If the above environment variables are set, please unset the environment variables as below:

```
$ unset LOG
$ unset OK
$ echo $LOG $OK
$ <- default setting should be empty</pre>
```

6.1.7 Baseline Requirements

The base environment that this release will be applied against:

• Prospect® 8.0 for Lucent UMTS RP9 (5.1.9.0.0) base release (either a fresh install or an upgrade from an earlier release)

The following upgrades and patches are optional, as this release includes them:

- Prospect® 8.0 for Lucent UMTS RP9.1 (6.0.9.1.0) upgrade
- Prospect® 8.0 for Lucent UMTS RP9.1 patch 10 (6.0.9.1.10)
- Prospect® 8.0 for Lucent UMTS RP9.2

You can check this by running the following command as the Prospect UNIX user:

```
$ show_installed
```

This will produce output similar to the following:

```
COMPONENT INSTALL_TY INSTALL_DATE

CORE Prospect rev 8.0.6.0 b13 UPGRADE 09-MAY-19 12:58:58
```

CORE Prospect rev 8.0.6.3 b1	PATCH	09-MAY-19 14:46:28
VENDOR LuUTRAN rev 5.1.9.0.0 b2	INSTALL	08-JUL-28 09:58:53
VENDOR LuUMTS_SGSN rev 5.1.9.0.0 b2	INSTALL	08-JUL-28 10:01:03
VENDOR LuUMTS_CS rev 5.1.9.0.0 b2	INSTALL	08-JUL-28 10:04:40
VENDOR LucComExtra rev 5.0.8.0.0 b3	INSTALL	08-JUL-28 10:04:49

Note: The output may have more components installed than the example given here if optional components are installed. The versions (rev) of CORE Prospect and VENDOR modules must be greater than or equal to those shown. The build number (b followed by a number) and install type (INSTALL or UPGRADE) for each component is unimportant. The install dates will be different from those shown.

Important! It is critical that you apply this release to an environment at the correct release level. Please verify the environment carefully. For more information, please contact customer support.

6.1.8 WM_MESSAGE_LOG Partition

This pre-validation only apply to Core 8.0.6.3.0 or later.

Make sure the wm_message_log partition is available prior to this upgrade install.

Perform the following to validate:

select * from user_tab_partitions where table_name = 'WM_MESSAGE_LOG';

Ensure there is return row(s) with partition PYYYYMMDD+1 that covered the current system date. Example, today is 2009 July 08, make sure that is partition starting from P20090709 onward in the wm_message_log.

6.2 Installation Privileges Required

The following privileges are required for an upgrade.

Privilege	Required
UNIX flexpm user in DBA group	Yes
Root privilege required	No

6.3 Pre-Installation Instructions

6.3.1 System Backup

This upgrade cannot be uninstalled. This upgrade involves updates to the database and the metadata; therefore recovery from backup is the only way to reverse the changes made by this upgrade. You must perform a full system backup before installing this upgrade. If needed, please refer to the "Backing up the Database" section of the Prospect Administration Guide. Please contact customer support if you require further support.

6.3.2 Network Timeouts

If your system has a security policy in place such that a session is disconnected after a lengthy period of apparent inactivity, you should disable it during this upgrade. The upgrade can take over an hour to run and requires no user input during the majority of the upgrade. This can make the upgrade session appear idle. If timeouts are not disabled, the upgrade terminal could be disconnected during the upgrade.

6.3.3 Warning: Disable server access in Prospect Web

If Prospect Web is accessing this Prospect® installation, then use the admin tool to disable the corresponding data source. Failure to do this step may results in errors in both the upgrade and Prospect Web. Consult customer support if you have questions.

6.3.4 Note schedule_maint Settings

If the server is down for an extended period of time, the script schedule_maint could display some jobs as not scheduled. Thus the jobs will not run and the system will fail.

Before the upgrade, run schedule_maint to get a list of the current schedule settings. Make a note of the next run time of each job.

6.3.5 Note Partition Maintenance Settings

During the upgrade a number of new tables are added to the Prospect system. Occasionally this can cause the script past_part_maint.sh to display data retention settings as "Unlimited."

Before the upgrade, run past_part_maint.sh to get a list of the current data retention settings.

6.3.6 Oracle Sys Account Access

Prospect® 8.0 requires that all logins using the sys account must be qualified as sysdba. The following Oracle changes may be required.

1. Verify that the change is needed. From a remote system (that is, not the Prospect server), try to log in using sqlplus:

```
$ sqlplus /nolog
SQL> connect sys/change_on_install@flexpm as sysdba
```

If you can log in, you can skip the rest of this procedure.

If you get an error concerning privileges, then you need to continue with the following steps.

2. Set the remote_login_passwordfile parameter in the init<sid>.ora file. On most Prospect systems the sid is flexpm. Log in as the oracle user, and then enter the following command.

```
$ cd $ORACLE_BASE/admin/flexpm/pfile
```

Edit the init<sid>.ora file (for example, initflexpm.ora) and add the following line.

```
remote_login_passwordfile=EXCLUSIVE
```

4. Create the Oracle password file to allow remote sys access. While still logged in as the oracle user verify that <code>\$ORACLE_HOME</code> and <code>\$ORACLE_SID</code> are correct, then enter the following command.

```
$ orapwd file=${ORACLE_HOME}/dbs/orapw${ORACLE_SID} \
password=change_on_install entries=10
```

- 5. Bounce the database so that the parameter and password file take effect. If you get an error concerning the password file, verify that it is in the dbs directory and that the filename is orapwflexpm.
- 6. To verify that the changes have taken effect, repeat step 1.

6.3.7 Check Prospect Environment

- 1. Log in as user flexpm, and source the .profile (if you are not already).
- 2. Check whether \$FLEXPM_HOME, \$FLEXPM_BASE and \$release are set correctly:

```
$ echo $FLEXPM_HOME
$ echo $FLEXPM_BASE
$ echo $release
```

If the variable FLEXPM_HOME is not set (the output is just a blank line), or the release variable value does not equal to ProspectBase, edit the file .profile and amend the line that sets the install variable to read:

```
install=X
```

where X is the current value of the \$FLEXPM_BASE environment variable (make sure it does not contain ProspectBase string, for example,

```
install="/u01/apps/WatchMark/FlexPM/LucentUMTS").
```

Amend the line that sets the release variable to read:

```
release="ProspectBase"
```

Edit the file .profile.flexpm and commenting out (by placing # at the beginning of the line) the install= and release= lines if these 2 lines are in the file.

3. Logout the system and relog in as user flexpm, and source the .profile to confirm those variables settings are correct.

6.4 Installation Instructions

NOTE: For installations and upgrades to Solaris 10, please refer to the Server Preparation Guide to install Perl and Java

Important! Un-installation of this upgrade is not supported. A complete system back up is recommended before installing this upgrade

Important! If Prospect Core version 8.0.6 is installed then core patch IF0003 must be installed prior to installation of the RP9.3 upgrade. If core patch IF0003 is not applied then the data dictionary will not be fully updated during the upgrade, causing the jloader for RNCCN data to fail and also the datasource fields will be missing in the Prospect client for the CallServer and UTRAN modules.

- 1. Log in as user flexpm, and source the .profile (if you are not already).
- 2. Download and copy the TAR package to be installed on to the appropriate Prospect Server into a staging directory, for example,

```
$ mkdir -p /var/tmp/6.0.9.3-TIV-PROSPECT-LUUMTS-FP0000
```

3. cd to the staging directory

```
$ cd /var/tmp/6.0.9.3-TIV-PROSPECT-LUUMTS-FP0000
```

4. Untar the TAR package using the following command:

```
$ tar -xvf 6.0.9.3-TIV-PROSPECT-LUUMTS-FP0000.tar
```

5. Preview the installation for problems before installing the update:

If the database is Oracle 10g, use this:

```
$ ./wminstall -b $FLEXPM_BASE -d $DB_CONNECT \
-portbase $PORT_GROUP -spec spec.xml -preview -v
```

6. Stop the middleware from running if it is currently running

```
$ ps-mgr stop all
$ ps-mgr halt
```

7. Check the results of the preview and contact IBM support if you have any queries. Please refer to Section 9 for sample installation preview output.

Run the installation by typing the following command:

```
$ ./wminstall -b $FLEXPM_BASE -d $DB_CONNECT \
-portbase $PORT_GROUP -spec spec.xml -v
```

The installation of the upgrade might take a while to complete. The log file (with a filename like <YYYY>_<MM>_<DD>_<HH>_<MM>_<SS>) under /var/tmp can be viewed from another console during the installation for the installation progress.

RP9.3 includes RP9.1 and RP9.2. If wminstall detects any problems during the RP9.1 installation or RP9.2 install, it does not attempt to install RP9.3. If this happens, fix the problems and rerun wminstall.

8. After wminstall has finished, please examine detail.log under the directory \$FLEXPM_HOME/audit/<YYYY>_<MM>_<DD>_<HH>_<MM>_<SS>_<running number> for any error messages.

6.5 Post-Installation Instructions

6.5.1 Check for invalid objects

After the upgrade finishes, it is useful to check for any invalid objects in the database. Log into the database using SQL*Plus:

```
$ sqlplus $DB_CONNECT
SQL> select object_type, object_name from user_objects where
status='INVALID' and object_type<>'VIEW';
```

This should produce the output:

```
no rows selected
```

If the above SELECT statement outputs some rows, please recompile the schema. Use the correct value for schema_name if it differs from below:

```
SQL> execute dbms_utility.compile_schema('schema_name',FALSE);
If your schema_name is FLEXPM, you can use the command as below:-
```

```
SQL> execute dbms_utility.compile_schema('FLEXPM',FALSE);
```

6.5.2 Verify Installed Versions

It is helpful to run show_installed to confirm that everything installed correctly.

The output from this command should be similar to the following:

COMPONENT	INSTALL_TY	INSTALL_DATE
CORE Prospect rev 8.0.6.0 b13	UPGRADE	09-MAY-19 12:58:58
CORE Prospect rev 8.0.6.3 b1	PATCH	09-MAY-19 14:46:28
VENDOR LuUMTS_SGSN rev 5.1.9.0.0 b2	INSTALL	08-OCT-16 16:48:59
VENDOR LuUMTS_CS rev 6.0.9.3.0 b5	UPGRADE	09-MAY-26 18:14:34
VENDOR LuUTRAN rev 6.0.9.3.0 b5	UPGRADE	09-MAY-26 16:55:36
VENDOR LucComExtra rev 5.0.8.0.0 b3	TNSTALL	08-OCT-16 16:55:47

The version numbers (rev) should be the same as those shown. The build numbers (b followed by a number) might be different. The install type (INSTALL, PATCH or UPGRADE) is not important. The install dates and times will be different from those shown.

6.5.3 Configure Time Zone Region

During installation, the schema's Time Zone Region defaults to the 'Greenwich Mean Time' Time Zone Region.

For further information on Time Zone Regions please refer to the Prospect Administration Guide.

This can be configured as follows:

1. Review your current Time Zone Region. If your time zone information is correct, skip to section 5.5.4.

```
$ set_tzr.sh -t
Connected.
```

Greenwich Mean Time

2. Review the list of available Time Zone Regions:

```
$ timezoneregion.sh -t
Connected.
America/Anchorage
                   -540 [1] First Sunday on or after Mar 8 at
02:00 ... First Sunday in Nov at 02:00, 60 minutes
America/Buenos Aires -180
                   -240
America/Caracas
America/Chicago -360 [1] First Sunday on or after Mar 8 at
02:00 ... First Sunday in Nov at 02:00, 60 minutes
America/Denver -420 [1] First Sunday on or after Mar 8 at
02:00 ... First Sunday in Nov at 02:00, 60 minutes
America/Honolulu
                   -600
America/Indianapolis -300
America/Lima Peru
                    -300
America/Mexico City -480 [1] First Sunday on or after Mar 8 at
02:00 ... First Sunday in Nov at 02:00, 60 minutes
America/New York -300 [1] First Sunday on or after Mar 8 at
02:00 ... First Sunday in Nov at 02:00, 60 minutes
America/Noronha
                    -120
```

3. Set your Time Zone Region using one of the existing options:

```
$ set_tzr.sh -n "America/Seattle"
Connected.
OK: America/Seattle
```

6.5.4 Start the Middleware

Once the installation has completed, you should start the middleware so that data can be loaded and the system can be used.

- 1. Log in as user flexpm, if you are not already logged in.
- 2. Start the middleware

```
$ wmpm-init start all
```

6.5.5 Post Install Checking

1. Check schedule settings

After the middleware has been restarted, run schedule_maint to check the next run time of the scheduled jobs. If any of the jobs display the next run time as "job not scheduled" then run schedule_maint and update the values to an appropriate future time based on the settings you recorded in Section 5.3.4.

For example, to set the pm_daily job to run at 1:00 am on 1 May 2006.

```
schedule maint pm daily 20060501 0100
```

Note: Remember to enter a time in the future. If unsure of appropriate times then please contact customer support

2. Check partition settings

Run past_part_maint.sh to get a list of the current data retention settings. If any of the number displays is different that settings you recorded in Section 5.3.5, then run past_part_maint.sh to update the values.

For example, to have 30 days data retention for traffic table types.

past_part_maint.sh traffic 30

6.5.6 Enable Datasource in Prospect Web

If this Prospect system is associated with a Prospect Web system and you disabled the datasource in section 5.3.3 then use the Prospect Web Administration Tool to enable the datasource with this Prospect system.

6.6 Uninstallation Procedure

This release cannot be uninstalled. It involves updates to the database or the metadata, and recovery from backup is the only way to reverse the changes. You must perform a full system backup before installing this release. If needed, please refer to the "Backing up the Database" section of the Prospect Administration Guide. Please contact customer support if you require further support.

7 Useful Hints

7.1 Prospect Client/Server Compatibility

The Prospect client is backward compatible with older Prospect servers. If you try to use an older client with newer server, the results are undefined.

7.2 Prospect Single Client

This release features a single, uniform client for all vendor versions.

Users of the Prospect system have expressed the need to connect to all of their Prospect servers with a single client. Several customers have installed multiple Prospect servers, which cover several different vendor technologies. Two key benefits to the single client are:

Reduced number of clients that your IT department needs to install

Reduced confusion among users over which Prospect client should be used with which Prospect server.

The single Prospect client supports Prospect servers co-released with the client and a defined number of server versions released before the client. Prospect (core) servers released after the client are not supported (that is, the Prospect client is not forward-compatible). Contact your IBM customer support representative to identify the server versions that your client supports.

This feature removes support for two or more Prospect clients installed on the same PC. Side-by-side installations were originally supported because the Prospect client was not backward compatible with older versions of the server. Full support for backward compatibility removes the need for side-by-side support.

7.3 Ports Used by the Prospect Client

The Prospect client uses two ports to connect to the Prospect server:

- **FX port** Most queries from the Prospect client, status monitor, Auto Downloader, and DSMonitor (DSMonitor is a process that registers for updates from the DataServer) use this port. By default the FX port number is the base port plus four (4). For example, if the base port is 6440, the FX port would be 6444.
- **Event port** DSMonitor and Prospect Alarm use this port. By default the Event port number is the base port plus three (3). For example, if the base port is 6440, the Event port would be 6443.

If you have closed the ports required by the Prospect client for security reasons, or if you are using these ports for other services, you need to either re-open or re-assign them to the Prospect FX and Event ports. Otherwise, the ability for the Prospect client to be able to communicate with the Prospect server is compromised.

To determine which port numbers are required for your system, log on as flexpm and run the following commands:

```
$ echo $FX_DS_PORT
$ echo $EVENT PORT
```

7.4 Use of add_filetype_timeout.sh is not recommended

Using the <code>add_filetype_timeout.sh</code> script is not recommended, as the user will wait a considerable amount of time. This is caused by the time taken for the script to clean the schedule table during the middleware start up.

The <code>add_filetype_timeout.sh</code> script is not recommended to be used for checking the data file if it does not arrive as expected. If used, user will have to wait for a substantial period of time as the <code>add_filetype_timeout.sh</code> script increases the time to clean up the schedule table when the middleware is started.

7.5 Traffic Template Description Length Limitation in Prospect Client

Field description in traffic template editor has a limitation of displaying 260 characters only. Traffic template editor will display only the first 260 characters when the actual length of field description is longer than that.

For complete field description, please refer to Prospect Performance Data Reference or the online help.

7.6 WARN message in RNCCN loader log

Whenever there is counter having NULL value, WARN message similar to the one below will be logged in loader log.

12:10:20,314 WARN [SqlCounterDataAccess] Unable to convert VS.ACTIVESETUPDATEPERRNC=null to Integer; setting to null

This WARN message is expected and harmless to the loading process.

7.7 New table type options for partition maintenance

Partition maintenance scripts such as part_part_maint.sh, add_part.sh, delete_part.sh support new table type options now. The new table type options are based on technology types that currently supported in Prospect, which are SGSN, CallServer and UTRAN. This is to provide flexibility in setting different retention period for different technology type.

8 Customer Support

Contact IBM support if a problem is encountered during the installation of this patch or release.

9 Manifest

The manifest for this release is contained in a file called Manifest.txt at the top level of the TAR archive.

10 Sample Output from wminstall

The following text is an example of the output from wminstall when it is run with the preview option. In this example, RP9.2 has already been installed. An electronic copy of the license agreement is held in the file license.txt, in same directory as wminstall.

```
$ ./wminstall -b $FLEXPM_BASE -d $DB_CONNECT \
-portbase $PORT_GROUP -spec spec.xml -preview -v
+----
  Processing : ./wminstall
  Start Time : 11:15:27
    Date : 2009_06_04
(license agreement omitted)
  Installer Self-Audit :
       spec.xml
       LuUTRAN - 6.0.9.1.0_wminst_LuUTRAN.tgz : Exists
       LuUTRAN - 6.0.9.2.0_wminst_LuUTRAN.tgz : Exists
        LuUMTS_CS - 6.0.9.2.0_wminst_LuUMTS_CS.tqz : Exists
        LuUTRAN - 6.0.9.3.0_wminst_LuUTRAN.tgz : Exists
        LuUMTS_CS - 6.0.9.3.0_wminst_LuUMTS_CS.tgz : Exists
+-----
  Core Defaults :
       DBCONNECT
                                          : flexpm/flexpm@flexpm
        BASEDIR
/u01/apps/WatchMark/FlexPM/LucentUMTS
       CORE_INSTALLDIR
                                          : ProspectBase
       PORTBASE
                                           : 6440
        TMPDIR
                                           : /var/tmp
        CLASSPATH
lib/preval.jar:lib/jdom.jar:lib/log4j.jar:lib/jython.jar:/u01/apps/oracle/product/10.2.0/jdbc/lib/classes12.zip:.
  Module Overrides :
      DBCONNECT
                                           : <No Override>
       BASEDIR
                                          : <No Override>
       CORE_INSTALLDIR
                                          : <No Override>
        PORTBASE
                                           : <No Override>
        TMPDIR
                                          : <No Override>
+----
  Passed Parms :
       db_connect
                                          : flexpm/flexpm@flexpm
        basedir
/u01/apps/WatchMark/FlexPM/LucentUMTS
        install_dir
                                          : <No Override>
        portbase
                                          : 8440
         tmpdir
                                           : <No Override>
```

```
classpath
                                              : <No Override>
         spec
                                              : spec.xml
                                              : PREVIEW
         Process Mode
  Core Composite Defaults :
        DBCONNECT
                                              : flexpm/flexpm@flexpm
         SYSPASSWD
                                              : <Set>
         BASEDIR
/u01/apps/WatchMark/FlexPM/LucentUMTS
         CORE_INSTALLDIR
                                              : ProspectBase
         PORTBASE
         TMPDIR
                                              : /var/tmp
         CLASSPATH
lib/preval.jar:lib/jdom.jar:lib/log4j.jar:lib/jython.jar:/u01/apps/oracle/product/10.2.0/jdbc/lib/classes12.zip:.
  Copy spec.xml :
    Сору
                                             : Successful
   Validating Global Routines :
        PRE_VALIDATE
                                             : <None>
         PRE_INSTALL
                                              : <None>
         POST_INSTALL
/u01/apps/WatchMark/FlexPM/INSTALLATIONS/LucentUMTS/RP9.3/scripts/runPostVendo
r.sh : Exists
         POST_VALIDATE
                                              : <None>
+----
  Verifying LuUTRAN Routines - 6.0.9.1.0_wminst_LuUTRAN.tgz :
        PRE_INSTALL - patches/6.0.9.1.0/install_ProspectBase.sh :
       INSTALL
                    - patches/6.0.9.1.0/install_LuUTRAN.sh : Exists
  Verifying LuUTRAN Routines - 6.0.9.2.0_wminst_LuUTRAN.tgz :
        INSTALL - patches/6.0.9.2.0/install_LuUTRAN.sh : Exists
  Verifying LuUMTS_CS Routines - 6.0.9.2.0_wminst_LuUMTS_CS.tgz :
                     - patches/6.0.9.2.0/install_LuUMTS_CS.sh : Exists
        INSTALL
   Verifying LuUTRAN Routines - 6.0.9.3.0_wminst_LuUTRAN.tgz :
        INSTALL - patches/6.0.9.3.0/LuUTRAN/install.sh : Exists
  Verifying LuUMTS_CS Routines - 6.0.9.3.0_wminst_LuUMTS_CS.tgz :
        PRE_INSTALL - patches/6.0.9.3.0/ProspectBase/install.sh :
        INSTALL
                     - patches/6.0.9.3.0/LuUMTS_CS/install.sh : Exists
| Check Depends
         Basedir
/u01/apps/WatchMark/FlexPM/LucentUMTS exists
         Installdir
/u01/apps/WatchMark/FlexPM/LucentUMTS/ProspectBase exists
        sqlplus
                                    : Schema Exists
+----
```

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```
| Registry Info :
         Product (CORE)
                                               : Platform (Prospect)
Release (8.0.6.0.13)
| Product (CORE)
                                               : Platform (Prospect)
Release (8.0.6.3.0)
        Product (VENDOR)
                                               : Platform (LucComExtra)
Release (5.0.8.0.0.3)
| Product (VENDOR)
Release (5.1.9.0.0.2)
                                               : Platform (LuUMTS_SGSN)
        Product (VENDOR)
                                               : Platform (LuUTRAN)
Release (5.1.9.0.0.2)
         Product (VENDOR)
                                               : Platform (LuUMTS_CS)
Release (5.1.9.0.0.2)
| Vendor Tarball :
         Module (LuUTRAN) version 6.0.9.1.0.3 : Less than register
version - 6.0.9.2.0.3
         6.0.9.1.0_wminst_LuUTRAN.tgz
                                             : SKIP - VENDOR -
6.0.9.1.0.3
| Vendor Tarball :
        Module (LuUTRAN) version 6.0.9.2.0.3 : Less than register
version - 6.0.9.2.0.3
         6.0.9.2.0_wminst_LuUTRAN.tgz : SKIP - VENDOR -
6.0.9.2.0.3
+----
| Vendor Tarball :
         Module (LuUMTS_CS) version 6.0.9.2.0.3 : Less than register
version - 6.0.9.2.0.3
        6.0.9.2.0_wminst_LuUMTS_CS.tgz : SKIP - VENDOR -
6.0.9.2.0.3
    Vendor Tarball :
        Module - LuUTRAN, version - 6.0.9.3.0.2 : All prerequisites met
         6.0.9.3.0_wminst_LuUTRAN.tgz : UPGRADE - VENDOR -
  Vendor Tarball :
      Module - LuUMTS_CS, version - 6.0.9.3.0.2 : All prerequisites met
         6.0.9.3.0_wminst_LuUMTS_CS.tgz
                                              : UPGRADE - VENDOR -
6.0.9.3.0.2
  Processing Steps :
        Global PRE_VALIDATE
                                               : scripts/check os -o 5.9
-o 5.10
        Global PRE_VALIDATE
                                              : scripts/check_perl -p
                                              : scripts/check_space -s
         Global PRE_VALIDATE
400 -i /var/tmp
         Global PRE_VALIDATE
scripts/check_oracle_status -u $DBUSER -p $DBPASSWD
         Global PRE_VALIDATE
scripts/check_oracle_patch_lvl -u $DBUSER -p $DBPASSWD -o 10.2.0 --enterprise
         Global PRE_VALIDATE
scripts/check_oracle_tablespaces -u $DBUSER -p $DBPASSWD -t traffic_jumbo -a
```

```
Global PRE VALIDATE
scripts/check_oracle_tablespaces -u $DBUSER -p $DBPASSWD -t traffic_large -a
10%
          Global PRE_VALIDATE
scripts/check_oracle_tablespaces -u $DBUSER -p $DBPASSWD -t traffic_medium -a
          Global PRE_VALIDATE
scripts/check_oracle_tablespaces -u $DBUSER -p $DBPASSWD -t traffic_small -a
10%
          Global PRE_VALIDATE
scripts/check_oracle_tablespaces -u $DBUSER -p $DBPASSWD -t wm_flexpm -a 10%
          Global PRE_VALIDATE
scripts/check_oracle_tablespaces -u $DBUSER -p $DBPASSWD -t config -a 10%
          Global PRE_INSTALL
          TARBALL - 6.0.9.1.0_wminst_LuUTRAN.tgz : SKIP
          TARBALL - 6.0.9.2.0_wminst_LuUTRAN.tgz : SKIP
          TARBALL - 6.0.9.2.0_wminst_LuUMTS_CS.tgz : SKIP
          TARBALL - 6.0.9.3.0_wminst_LuUTRAN.tgz : UPGRADE
patches/6.0.9.3.0/LuUTRAN/install.sh
          TARBALL - 6.0.9.3.0_wminst_LuUMTS_CS.tgz : UPGRADE
          PRE_INSTALL
patches/6.0.9.3.0/ProspectBase/install.sh
          INSTALL
patches/6.0.9.3.0/LuUMTS_CS/install.sh
         Global POST_INSTALL
                                                  : scripts/runPostVendor.sh
          Global POST_VALIDATE
   Performing Global PRE Routines :
  PRE_VALIDATE :
                        : PASS
      check_os
                         : System version (5.9) matches required version(5.9)
      check_perl
                        : PASS
                         : CORRECT Perl version 5.6.1 found at
/usr/perl5/5.6.1/bin/perl
                         : Perl version 5.6.1 also found at /usr/bin/perl
                         : Ending: Return Code (0)
      check_space
                        : PASS
                         : /var/tmp exists
                         : Space available in Megabytes is 1784
                         : More than 110 percent of space required is
available (1784)
                         : Ending: Return Code (0)
      check_accounts
                         : PASS
                         : /etc/passwd found
                         : /etc/group found
                         : Ending: Return Code (0)
```

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```
middleware_status : PASS
                         : Ending: Return Code (0)
      check_oracle_sysdba: PASS
                         : check_oracle_sysdba
                         : Connection succeeded for
sys/change_on_install@flexpm
      check_oracle_status: PASS
                         : check_oracle_status
                              : oci8 JDBC datasource =
jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Getting hostname and port...
                         : thin JDBC datasource =
jdbc:oracle:thin:@yucca.hursley.ibm.com:1521:flexpm
                         : Connecting...
                         : thin JDBC connection OK!
      check_oracle_patch_lvl: PASS
                         : check_oracle_patch_lvl
                         : oci8 JDBC datasource = jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Querying...
                         : ORACLE91 ENTERPRISE EDITION 9.2.0.8.0
      check_oracle_tablespaces: PASS
                         : check_oracle_tablespaces
                         : oci8 JDBC datasource = jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Querying...
                         : Tablespace: TRAFFIC_JUMBO
                                       7320.0
                         : MB free:
                         : Percent free: 54.98798076923077
                         : Space Rqd: 10.0
      check_oracle_tablespaces: PASS
                         : check_oracle_tablespaces
                         : oci8 JDBC datasource = jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Querying...
                         : Tablespace: TRAFFIC_LARGE
                         : MB free:
                                       4667.0
                         : Percent free: 91.08118657298985
                         : Space Rqd: 10.0
      check_oracle_tablespaces: PASS
```

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```
: check_oracle_tablespaces
                         : oci8 JDBC datasource = jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Querying...
                         : Tablespace: TRAFFIC_MEDIUM
                         : MB free: 1202.875
                         : Percent free: 78.31217447916667
                         : Space Rqd: 10.0
      check_oracle_tablespaces: PASS
                        : check_oracle_tablespaces
                         : oci8 JDBC datasource = jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Querying...
                         : Tablespace: TRAFFIC_SMALL
                                       1005.625
                         : MB free:
                         : Percent free: 98.20556640625
                         : Space Rqd: 10.0
      check_oracle_tablespaces: PASS
                         : check_oracle_tablespaces
                         : oci8 JDBC datasource = jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Querying...
                         : Tablespace: WM_FLEXPM
                         : MB free: 1441.625
                         : Percent free: 80.0902777777777
                         : Space Rqd: 10.0
      check_oracle_tablespaces: PASS
                        : check_oracle_tablespaces
                         : oci8 JDBC datasource = jdbc:oracle:oci8:@flexpm
                         : Connecting...
                         : oci8 JDBC connection OK!
                         : Querying...
                         : Tablespace: CONFIG
                         : MB free:
                                       99.8125
                         : Percent free: 99.8125
                         : Space Rqd: 10.0
  Preview option selected :
         Shutting down after preview
  Error/Warning Summary :
      Warning
                      Shutting down
Preview option selected
```

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| End Time : 11:16:29 | Date : 2009_06_04

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