

Windchill 9.1 M050
Installation Notes
on a
Red Hat Linux 5.4 x86_64bit Platform

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Company:
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System Setup

1. Pre-install task

As root:

- xhost +
- install jdk: rpm -i jdk-1_6_0_11-linux-amd64.rpm
- Install the following OS patches/packages:
- yum install libXm.so.3
- yum install libaio-devel
- yum install unixODBC
- yum install unixODBC-devel
- yum install ncompress
- yum install sysstat
- yum upgrade
- o Mount a SAN/EMC directory to the linux server (fibre channel is best)
 - § Call it /ptc or /opt/ptc what ever you want. This /ptc./Windchill or /opt/ptc/Windchill will be aliased to \$WT_HOME
 - § Create a directory /ptc/tmp or /opt/ptc/tmp (The case and documentation attached has /ptc as the mount)
 - § Create a directory /ptc this is were all the applications will be installed.
- o Modify the following files
 - vi /etc/security/limits.conf: add the following lines to hopefully prevent "too many open files issue"


```
* soft nofile 4096
* hard nofile 63536
* soft nproc 2047
* hard nproc 16384
```
 - vi /etc/profile (if you want global environments settings for all users:


```
export FASTSEARCH=/ptc/IndexSearch/InStream_5.1/instream
export WT_HOME=/ptc/Windchill
export JAVA_HOME=/usr/java/latest
export TOMCAT_HOME=/ptc/Tomcat
export APACHE_HOME=/ptc/Apache
export ORACLE_BASE=/ptc/oracle
export ORACLE_HOME=$ORACLE_BASE/client10g
# Set up the library path alias:
export LD_LIBRARY_PATH=$FASTSEARCH/lib
export SHLIB_PATH=$FASTSEARCH/lib
export IATEMPDIR=/ptc/tmp
# Set up the search paths:
PATH=$JAVA_HOME/bin:$WT_HOME/bin:/ptc/links:$WT_HOME/ant/bin:$TOMCAT_HOME/bin:$ORACLE_HOME/bin:$APACHE_HOME/bin:$FASTSEARCH/bin:$PATH:$HOME/bin
```
 - vi /etc/sysctl.conf (This is dependent of how much ram you have!)


```
# Required for Oracle10G/11G
```

<pre>kernel.shmall = 2097152 kernel.sem = 250 32000 100 128 kernel.shmmni = 4096 kernel.shmmax = 2147483648 fs.file-max = 65536 net.ipv4.ip_local_port_range = 1024 65000 net.core.rmem_default = 262144 net.core.rmem_max = 262144 net.core.wmem_default = 262144 net.core.wmem_max = 262144</pre>	<pre># With 16GIG of RAM kernel.shmall = 2097152 kernel.sem = 250 32000 100 128 kernel.shmmni = 4096 net.core.rmem_default = 262144 net.core.wmem_default = 262144 kernel.shmmax = 536870912 fs.file-max = 6815744 net.ipv4.ip_local_port_range = 9000 65500 net.core.rmem_max = 4194304 net.core.wmem_max = 1048576 fs.aio-max-nr = 1048576</pre>	<pre>With 48GIG of RAM # Kernel sysctl configuration file for Red Hat Linux # # For binary values, 0 is disabled, 1 is enabled. See sysctl(8) and # sysctl.conf(5) for more details. # Controls IP packet forwarding net.ipv4.ip_forward = 0 # Controls source route verification net.ipv4.conf.default.rp_filter = 1 # Do not accept source routing net.ipv4.conf.default.accept_source_route = 0 # Controls the System Request debugging functionality of the kernel kernel.sysrq = 0 # Controls whether core dumps will append the PID to</pre>
---	---	---

		<pre> the core filename # Useful for debugging multi-threaded applications kernel.core_uses_pid = 1 # Controls the use of TCP syncookies net.ipv4.tcp_syncookies = 1 # Controls the maximum size of a message, in bytes kernel.msgmnb = 65536 # Controls the default maximum size of a message queue kernel.msgmax = 65536 # Controls the maximum shared segment size, in bytes kernel.shmmax = 68719476736 # Controls the maximum number of shared memory segments, in pages kernel.shmall = 4294967296 kernel.sem = 100 fs.file-max = 6815744 net.ipv4.ip_local_port_range = 9000 65500 net.core.rmem_default = 262144 net.core.wmem_default = 262144 net.core.rmem_max = 4194304 net.core.wmem_max = 1048576 fs.aio-max-nr = 1048576 </pre>
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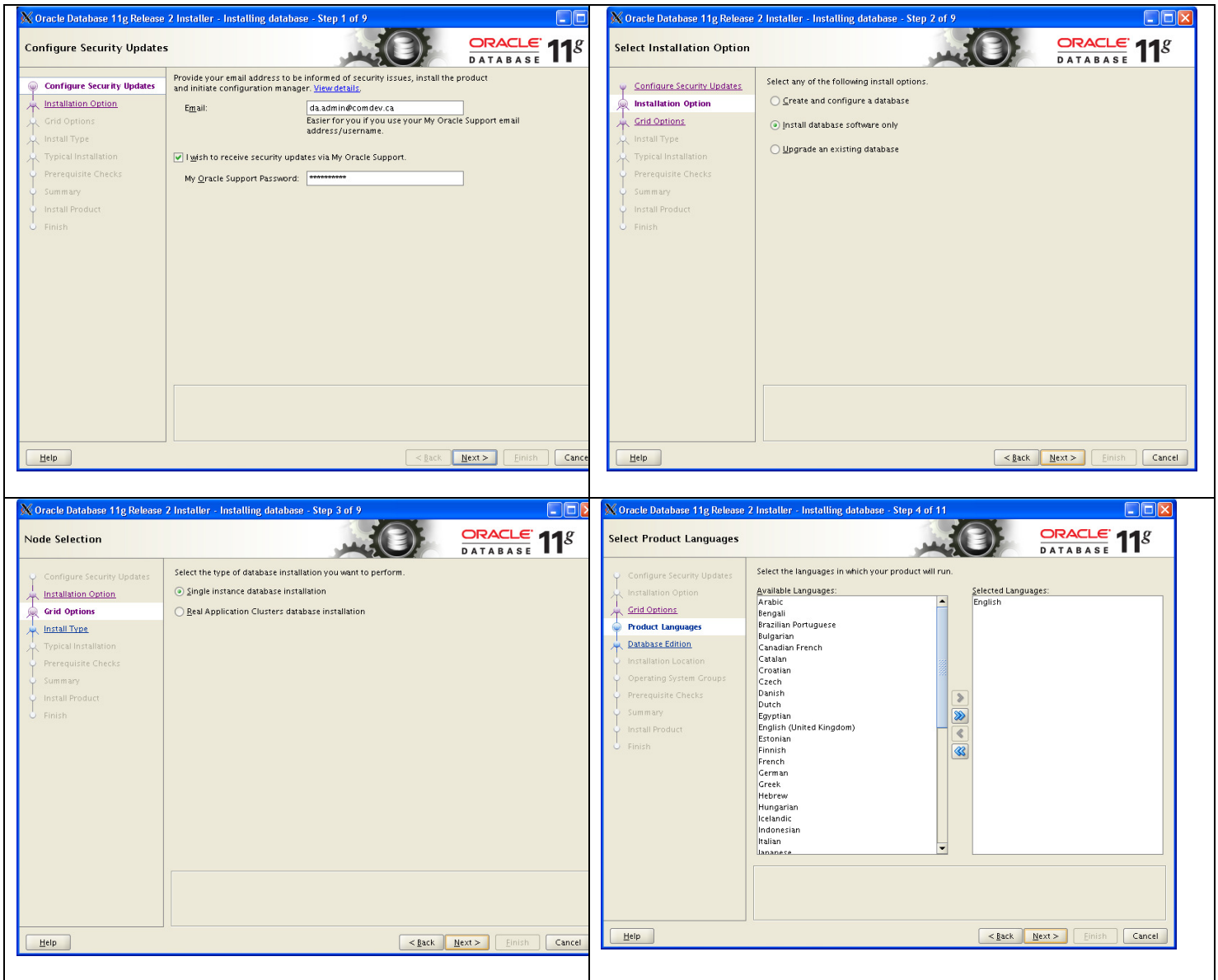
- o Install all you Red Hat Linux 4.7 x86_64bit patches. You will see there are patches even for ncompress.
- o Create a symbolic link: `ln -s /bin/sh /usr/bin/sh`
- o Change the permissions temporary to the mount or installation point:
 - § `chmod -R 777 /opt/ptc or /ptc`
- o Create OS groups:
 - § `instream`
 - § `wcadmin`
 - § `dba`
- o create OS users (userid:primary group)
 - § `instream:instream`
 - § `wcadmin:wcadmin`
 - § `oracle:dba`
- o For reuse and installing in other development and test servers extract all the CDs to their own respective directories in `/opt/ptc/software/WC91/CDs/...` or `/ptc/software/WC91/CDs/...`
 - § When extracting all the tars in their respective directories, it would be easier to name all the downloaded tars with smart naming:
 - `WC090_ProductViewStandard_M050.tar` to be extracted in `/ptc/software/WC91/CDs/WC91_ProductViewStandard_F000`
 -
 -
- If you plan to do an upgrade, you are going to need to install oracle client
- For OOTB installs on a separate server/database:
 - o `su - oracle`
 - o `/ptc/oracle/client10g`
 - o It is best to just create an oracle user for both Windchill and cognos, such as windchill and plmcognos. Make sure the oracle user have these rights:
 - § `Connect`
 - § `Resource`
 - § `Query rewrite`
 - § `Create sequence`
 - § `Create index`

Installation Steps

Install Oracle 11G (optional)

From a command prompt switch user as oracle from root

- su – oracle
- export your DISPLAY ie export DISPLAY=#.#.#:0.0
- we have place the oracle installation CDs in the central mounted location /ptc/software/Oracle/Oracle10GDatabase/database
- if installing the database, please install these RPMs:
 - for rhel4:



Oracle Database 11g Release 2 Installer - Installing database - Step 5 of 11

Select Database Edition

Which database edition do you want to install?

Enterprise Edition (4.29GB)
 Oracle Database 11g Enterprise Edition is a self-managing database that has the scalability, performance, high availability, and security features required to run the most demanding, mission-critical applications.

Standard Edition (4.22GB)
 Oracle Database 11g Standard Edition is ideal for work groups, departments, and small to medium-sized businesses looking for medium-sized solutions.

Standard Edition One (4.22GB)
 Oracle Database 11g Standard Edition One is ideal for work groups, departments, and small to medium-sized businesses looking for lower-cost solutions.

Select Options...

Help < Back Next > Finish Cancel

Choose Components

Component Name
<input checked="" type="checkbox"/> Oracle Partitioning
<input checked="" type="checkbox"/> Oracle OLAP
<input checked="" type="checkbox"/> Oracle Label Security
<input checked="" type="checkbox"/> Oracle Data Mining RDBMS Files
<input checked="" type="checkbox"/> Oracle Database Vault option
<input checked="" type="checkbox"/> Oracle Real Application Testing

Reset Defaults Select All De-Select All OK Cancel

Oracle Database 11g Release 2 Installer - Installing database - Step 6 of 11

Specify Installation Location

Specify an Oracle base path to place all Oracle software and configuration-related files. This location is the Oracle base directory.

Oracle Base: Browse...

Specify a location for storing Oracle software files. This location is the Oracle home directory.

Software Location: Browse...

Help < Back Next > Finish Cancel

Oracle Database 11g Release 2 Installer - Installing database - Step 7 of 11

Create Inventory

You are starting your first installation on this host. Specify a directory for installation files. This directory is called the "inventory directory". The installer automatically sets up subdirectories for each product to contain inventory data. The subdirectory for each product typically requires 150 kilobytes of disk space.

Inventory Directory: Browse...

Specify an operating system group whose members have write permission to the inventory directory (orainventory).

oraInventory_Group Name:

Help < Back Next > Finish Cancel

Oracle Database 11g Release 2 Installer - Installing database - Step 8 of 11

Privileged Operating System Groups

SYSDBA and SYSOPER privileges are required to create a database using operating system (OS) authentication. Membership in OSDBA grants the SYSDBA privilege, and membership in OSOPER grants the SYSOPER privilege, which is a subset of SYSDBA privileges. Select the name of the OSDBA group to grant the SYSDBA privilege. You must be a member of this group.

Database Administrator (OSDBA) Group:

Database Operator (OSOPER) Group:

Help < Back Next > Finish Cancel

Oracle Database 11g Release 2 Installer - Installing database - Step 8 of 11

Perform Prerequisite Checks

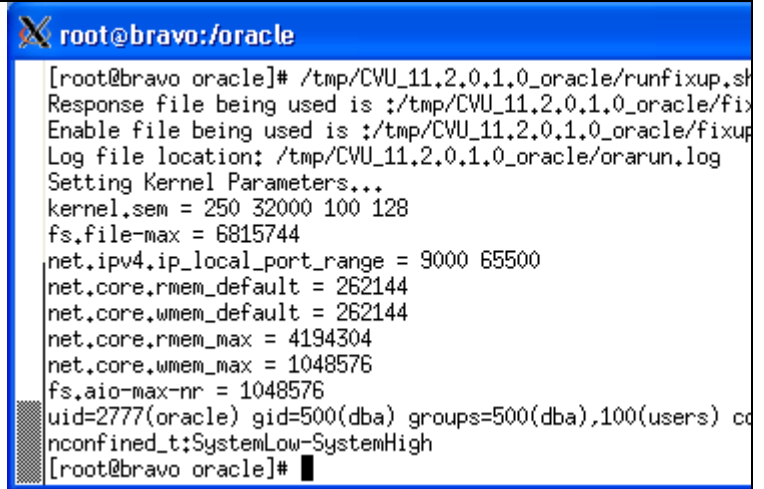
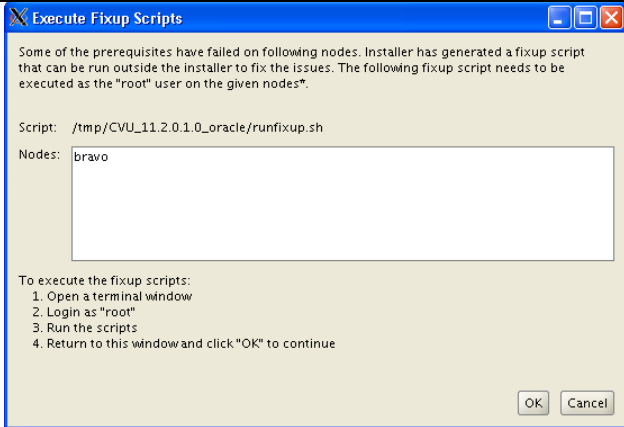
Some of the minimum requirements for installation are not completed. Review and fix the issues listed in the following table, and recheck the system.

Check Again Fix & Check Again ShowFailed Ignore All

Checks	Status	Fixable
Hard Limit: maximum open file descriptors	Failed	Yes
OS Kernel Parameter: semopm	Failed	Yes
OS Kernel Parameter: shmmax	Failed	Yes
OS Kernel Parameter: file-max	Failed	Yes
OS Kernel Parameter: ip_local_port_range	Failed	Yes
OS Kernel Parameter: rmem_default	Failed	Yes
OS Kernel Parameter: rmem_max	Failed	Yes
OS Kernel Parameter: wmem_default	Failed	Yes
OS Kernel Parameter: wmem_max	Failed	Yes
OS Kernel Parameter: aio-max-nr	Failed	Yes
Package: sysstat-5.0.5	Failed	
Package: unixODBC-devel-2.2.11	Failed	

This is a prerequisite condition to test whether the hard limit for "maximum open file descriptors" is set to at least 65536. [\(more details\)](#)
 Expected Value : 65536
 Actual Value : 63536

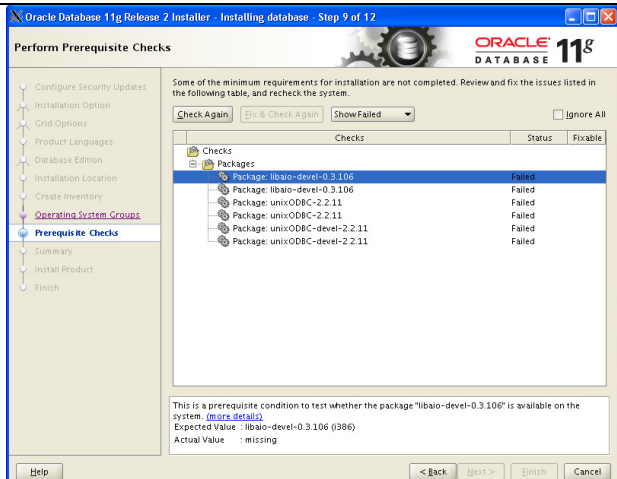
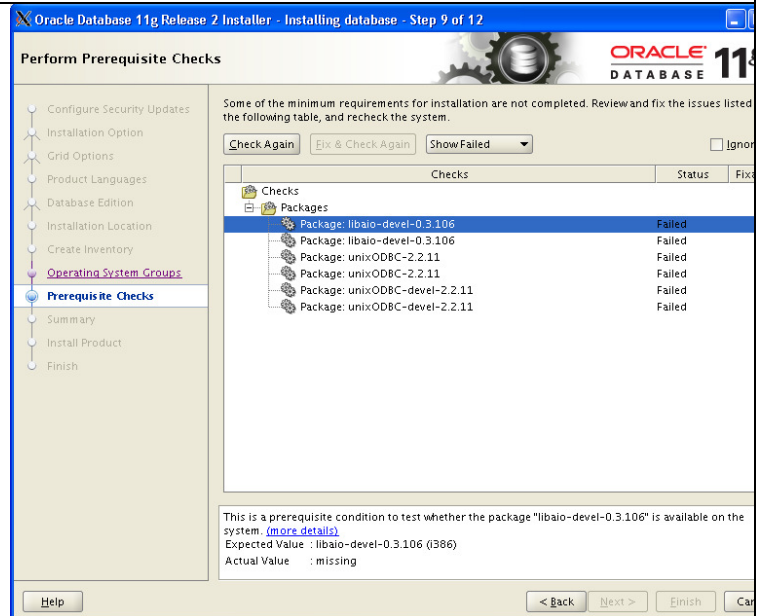
Help < Back Next > Finish Cancel



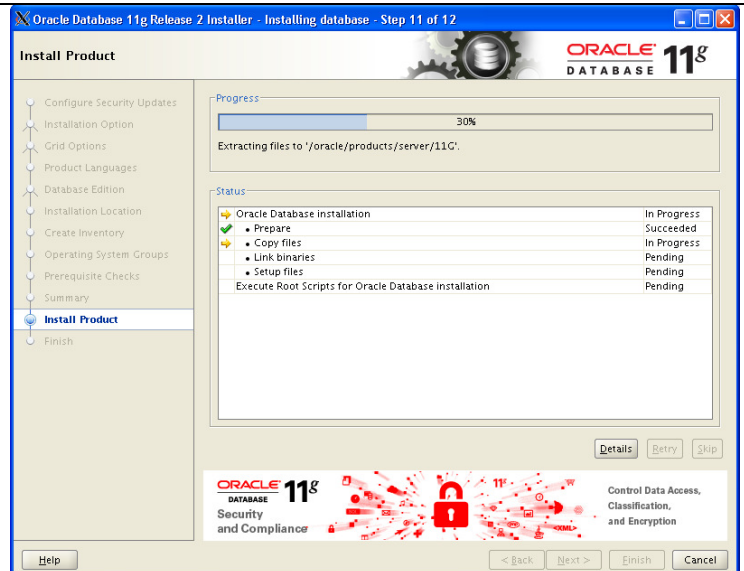
```

[ root@bravo oracle ]# /tmp/CVU_11.2.0.1.0_oracle/runfixup.sh
Response file being used is
:/tmp/CVU_11.2.0.1.0_oracle/fixup.response
Enable file being used is :/tmp/CVU_11.2.0.1.0_oracle/fixup.enable
Log file location: /tmp/CVU_11.2.0.1.0_oracle/orarun.log
Setting Kernel Parameters...
kernel.sem = 250 32000 100 128
fs.file-max = 6815744
net.ipv4.ip_local_port_range = 9000 65500
net.core.rmem_default = 262144
net.core.wmem_default = 262144
net.core.rmem_max = 4194304
net.core.wmem_max = 1048576
fs.aio-max-nr = 1048576
uid=2777(oracle) gid=500(dba) groups=500(dba),100(users)
context=root:system_r:u
nconfined_t:SystemLow-SystemHigh
[ root@bravo oracle ]#

```



Select Check Again

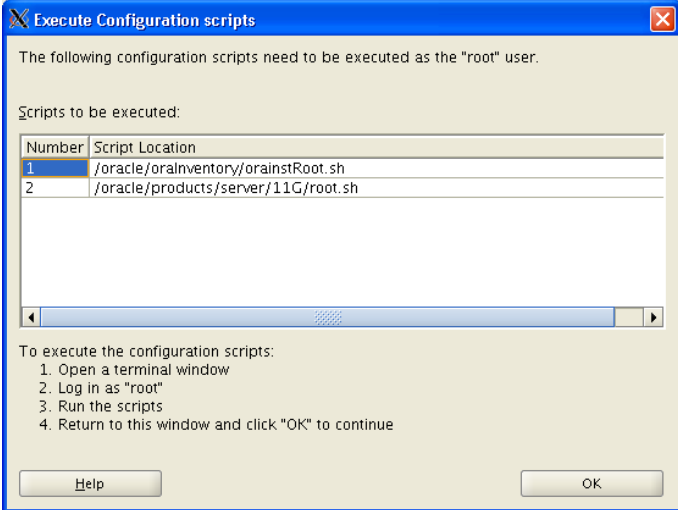


Select Finish

```

[ root@bravo products ]# /oracle/oralInventory/orainstRoot.sh
Changing permissions of /oracle/oralInventory.

```



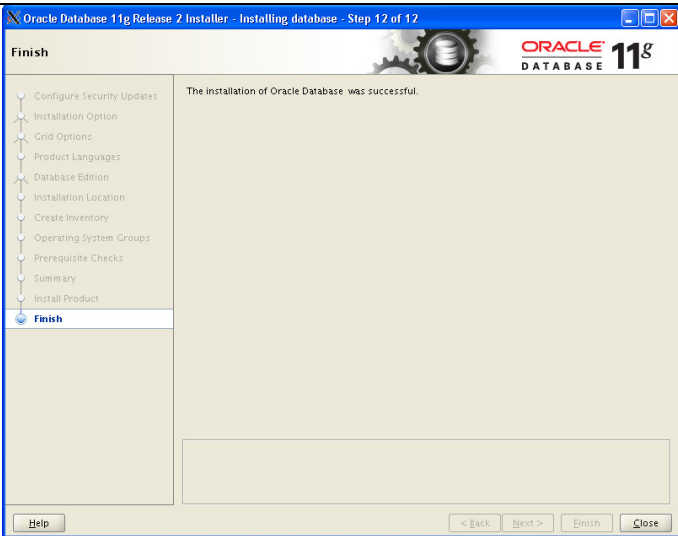
Adding read,write permissions for group.
 Removing read,write,execute permissions for world.

Changing groupname of /oracle/orainventory to dba.
 The execution of the script is complete.
 [root@bravo products]# /oracle/products/server/11G/root.sh
 Running Oracle 11g root.sh script...

The following environment variables are set as:
 ORACLE_OWNER= oracle
 ORACLE_HOME= /oracle/products/server/11G

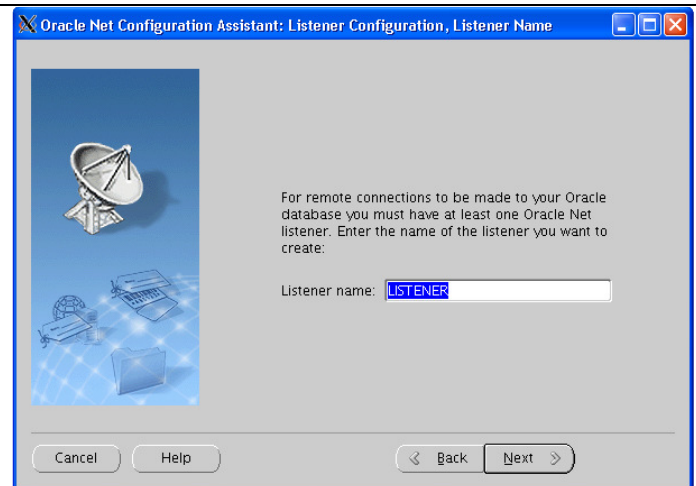
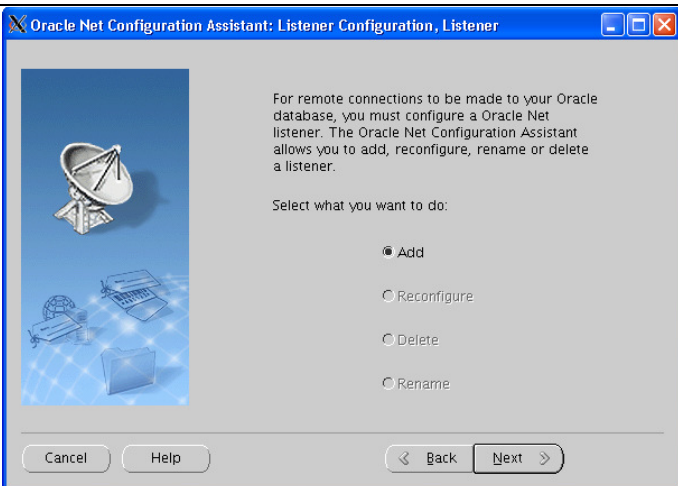
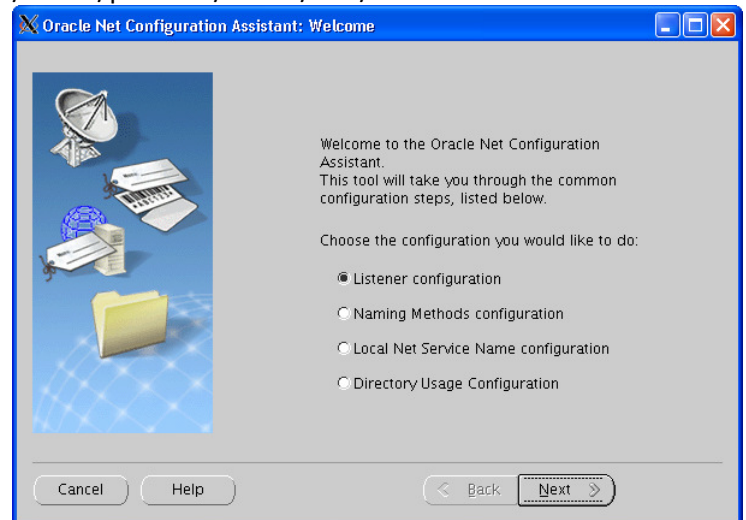
Enter the full pathname of the local bin directory: [/usr/local/bin]:
 Copying dbhome to /usr/local/bin ...
 Copying oraenv to /usr/local/bin ...
 Copying coraenv to /usr/local/bin ...

Creating /etc/oratab file...
 Entries will be added to the /etc/oratab file as needed by
 Database Configuration Assistant when a database is created
 Finished running generic part of root.sh script.
 Now product-specific root actions will be performed.
 Finished product-specific root actions.
 [root@bravo products]#



Select Close

Start a listner service:
 /oracle/products/server/11G/netca



Oracle Net Configuration Assistant: Listener Configuration, Select Protocols

You can configure the listener to accept connections over one or more protocols. Select which protocols you want to configure for this listener. Keep your configuration as simple as possible by configuring only the protocols you need.

Available Protocols: TCPS, IPC

Selected Protocols: TCP

Buttons: Cancel, Help, Back, Next

Oracle Net Configuration Assistant: Listener Configuration, TCP/IP Protocol

Which TCP/IP port number should the listener use? The port number selected should not be used by any other software on this computer.

Use the standard port number of 1521

Use another port number: 1521

Buttons: Cancel, Help, Back, Next

Oracle Net Configuration Assistant: Listener Configuration, More Listeners?

Would you like to configure another listener?

No

Yes

Buttons: Cancel, Help, Back, Next

Oracle Net Configuration Assistant: Listener Configuration Done

Listener configuration complete!

Buttons: Cancel, Help, Back, Next

Oracle Net Configuration Assistant: Welcome

Welcome to the Oracle Net Configuration Assistant. This tool will take you through the common configuration steps, listed below.

Choose the configuration you would like to do:

- Listener configuration
- Naming Methods configuration
- Local Net Service Name configuration
- Directory Usage Configuration

Buttons: Cancel, Help, Back, Next, Finish

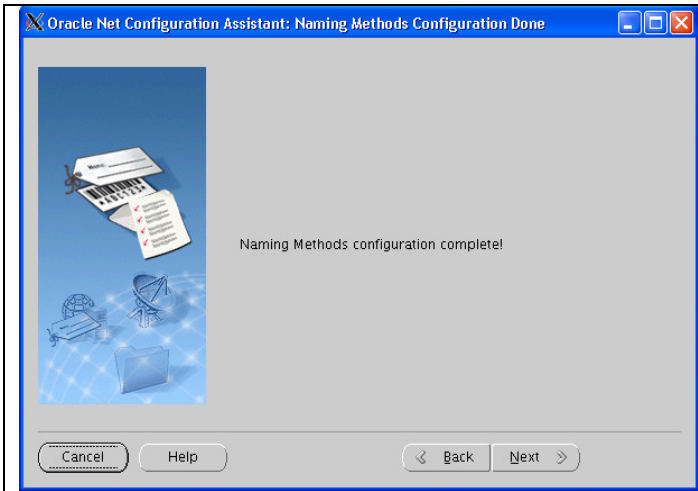
Oracle Net Configuration Assistant: Naming Methods Configuration, Select Naming Methods

Select the naming methods you want to use for resolving connect identifiers, and the order in which you want them used. Recommended naming methods have been preselected for you.

Available Naming Methods: NIS External Naming, Directory Naming, Easy Connect Naming

Selected Naming Methods: Local Naming

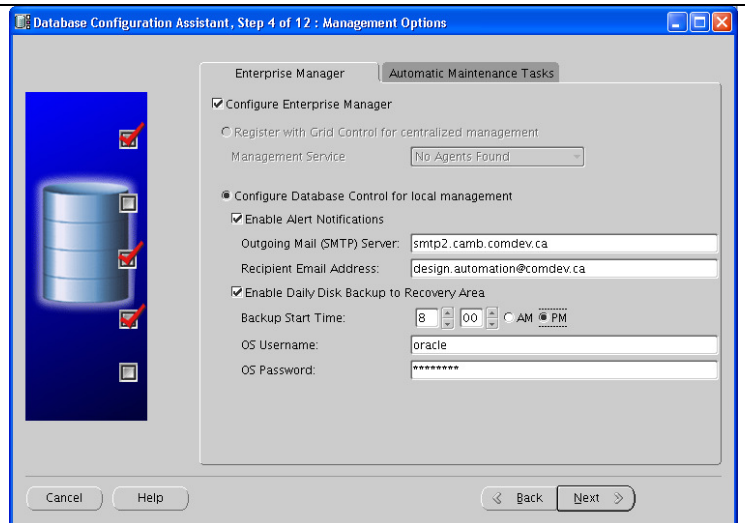
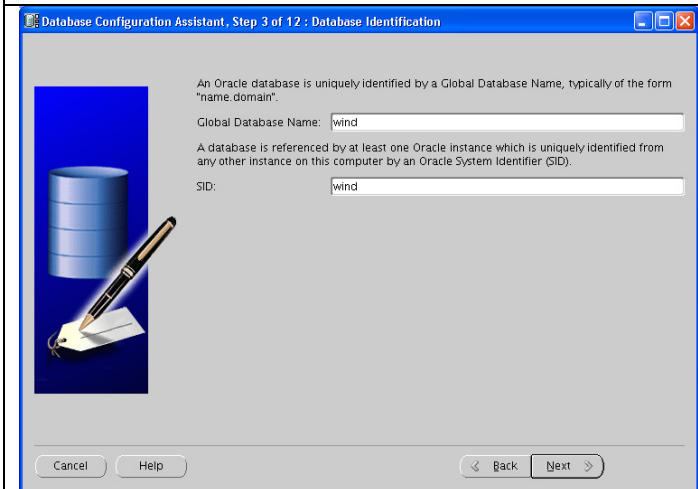
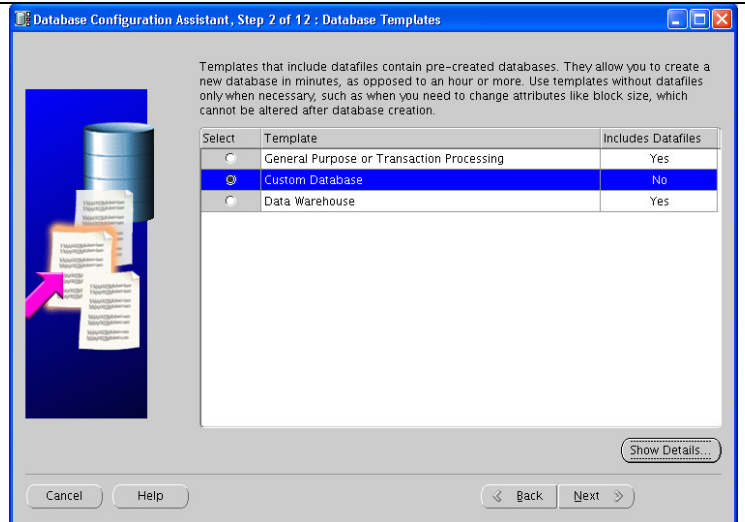
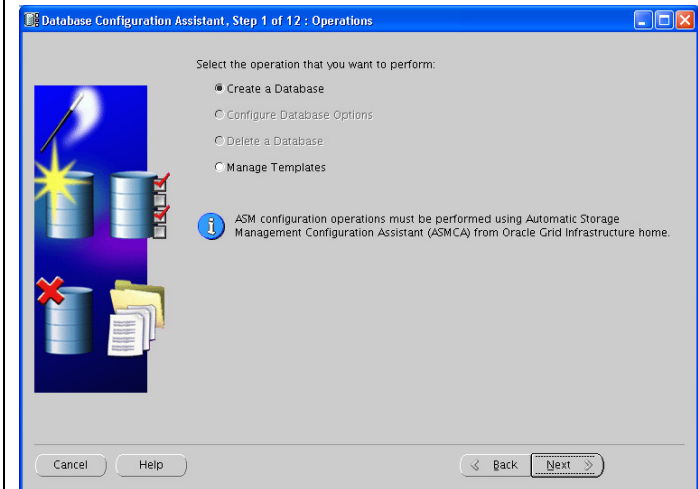
Buttons: Cancel, Help, Back, Next



Creation of the Database

As the oracle system user, run this command:

`$ORACLE_HOME/bin/dbca`



Database Configuration Assistant, Step 4 of 12 : Management Options

Enterprise Manager Automatic Maintenance Tasks

Oracle Database 11g provides the ability to automatically manage maintenance tasks such as optimizer statistics collection and proactive advisor reports. These tasks are run in a predefined maintenance window and their CPU consumption is throttled to prevent them from interfering with normal user work. The default maintenance windows are 10:00 PM - 2:00 AM on weekdays, and all weekend long. These defaults can be changed using Enterprise Manager at any time.

Enable automatic maintenance tasks

Cancel Help < Back Next >

Database Configuration Assistant, Step 5 of 12 : Database Credentials

For security reasons, you must specify passwords for the following user accounts in the new database.

Use Different Administrative Passwords

User Name	Password	Confirm Password
SYS		
SYSTEM		
DBSNMP		
SYSMAN		

Use the Same Administrative Password for All Accounts

Password:

Confirm Password:

Cancel Help < Back Next >

Database Configuration Assistant, Step 6 of 12 : Database File Locations

Specify storage type and locations for database files.

Storage Type: File System

Storage Locations:

Use Database File Locations from Template

Use Common Location for All Database Files

Database Files Location: /oracle/databases

Use Oracle-Managed Files

Database Area:

i If you want to specify different locations for any database files, pick any of the above options except Oracle-Managed Files and use the Storage page later to customize each file location. If you use Oracle-Managed Files, Oracle automatically generates the names for database files, which can not be changed on the Storage page.

File Location Variables...

Cancel Help < Back Next > Finish

Database Configuration Assistant, Step 7 of 12 : Recovery Configuration

Choose the recovery options for the database:

Specify Flash Recovery Area

This is used as the default for all disk based backup and recovery operations, and is also required for automatic disk based backup using Enterprise Manager. Oracle recommends that the database files and recovery files be located on physically different disks for data protection and performance.

Flash Recovery Area: {ORACLE_BASE}/flash_recovery_

Flash Recovery Area Size: 3882

Enable Archiving

File Location Variables...

Cancel Help < Back Next > Finish

Database Configuration Assistant, Step 8 of 12 : Database Content

Sample Schemas Custom Scripts

Specify the SQL scripts you want to run after the database is created. The scripts are run in the order they are listed below.

No scripts to run

Run the following scripts

Script Name
/software/Oracle/scripts/plmora-create-TablespaceWC9.sql

File Location Variables...

Cancel Help < Back Next > Finish

Database Configuration Assistant, Step 9 of 11 : Initialization Parameters

Memory Sizing Character Sets Connection Mode

Typical

Memory Size (SGA and PGA): 38559 MB

Percentage: 80 % 250 MB 48292 MB

Use Automatic Memory Management

Custom

Memory Management: Automatic Shared Memory Management

SGA Size: 1536 M Bytes

PGA Size: 17780 M Bytes

Total Memory for Oracle: 19316 M Bytes

All Initialization Parameters...

Cancel Help < Back Next > Finish

Name	Value	Override D...	Category
cluster_database	FALSE		Cluster Database
compatible	11.2.0.0.0	✓	Miscellaneous
control_files	('/oracle/data...	✓	File Configuration
db_block_size	16384	✓	Cache and I/O
db_create_file_dest			File Configuration
db_create_online_l...			File Configuration
db_create_online_l...			File Configuration
db_domain		✓	Database Identification
db_name	wind	✓	Database Identification
db_recovery_file_dest	{ORACLE_BAS...	✓	File Configuration
db_recovery_file_d...	4070572032	✓	File Configuration
db_unique_name			Miscellaneous
instance_number	0		Cluster Database
log_archive_dest_1			Archive
log_archive_dest_2			Archive
log_archive_dest_st...	enable		Archive
log_archive_dest_st...	enable		Archive
nls_language	AMERICAN		NLS
nls_territory	AMERICA		NLS
open_cursors	2000	✓	Cursors and Library Cache
pga_aggregate_target	36215717888		Sort, Hash Joins, Bitmap Indexes
processes	300	✓	Processes and Sessions
remote_listener			Network Registration
remote_login_pass...	EXCLUSIVE	✓	Security and Auditing
sessions	115		Processes and Sessions
sga_target	1610612736		SGA Memory
shared_servers	0		Shared Server
star_transformation...	FALSE		Optimizer
undo_tablespace	UNDOTBS1	✓	System Managed Undo and Rollback S...

Changed

open_cursors from 300 to 3000

processes from 150 to 300

session from 115 to 230

Database Configuration Assistant, Step 9 of 11 : Initialization Parameters

Memory Sizing Character Sets Connection Mode

Typical

Memory Size (SGA and PGA): 24064 MB

Percentage: 50 % 250 MB 48292 MB

Use Automatic Memory Management Show Memory Distribution...

Custom

Memory Management: Automatic Shared Memory Management

SGA Size: 1536 M Bytes

PGA Size: 17780 M Bytes

Total Memory for Oracle: 19316 M Bytes

All Initialization Parameters...

Cancel Help Back Next Finish

Database Configuration Assistant, Step 9 of 11 : Initialization Parameters

Memory Sizing Character Sets Connection Mode

A block is the smallest unit of storage for allocation and for I/O. It cannot be changed once the database is created.

Block Size: 16384 Bytes

Specify the maximum number of operating system user processes that can be simultaneously connected to this database. The value of this parameter includes the user processes and the Oracle background processes.

Processes: 300

All Initialization Parameters...

Cancel Help Back Next Finish

Database Configuration Assistant, Step 9 of 11 : Initialization Parameters

Memory Sizing Character Sets Connection Mode

Database Character Set

Use the default

The default character set for this database is based on the language setting of this operating system: WE8MSWIN1252.

Use Unicode (AL32UTF8)

Setting character set to Unicode (AL32UTF8) enables you to store multiple language groups.

Choose from the list of character sets

Database Character Set: AL32UTF8 - Unicode UTF-8 Universal character set

Show recommended character sets only

National Character Set: UTF8 - Unicode 3.0 UTF-8 Universal character set, CESU-...

Default Language: American

Default Territory: United States

All Initialization Parameters...

Cancel Help Back Next Finish

Database Configuration Assistant, Step 9 of 11 : Initialization Parameters

Memory Sizing Character Sets Connection Mode

Select the mode in which you want your database to operate by default.

Dedicated Server Mode

For each client connection the database will allocate a resource dedicated to serving only that client. Use this mode when the number of total client connections is expected to be small or when clients will be making persistent, long-running requests to the database.

Shared Server Mode

Several client connections share a database-allocated pool of resources. Use this mode when a large number of users need to connect to the database simultaneously while efficiently utilizing system resources. The Oracle shared server feature will be enabled.

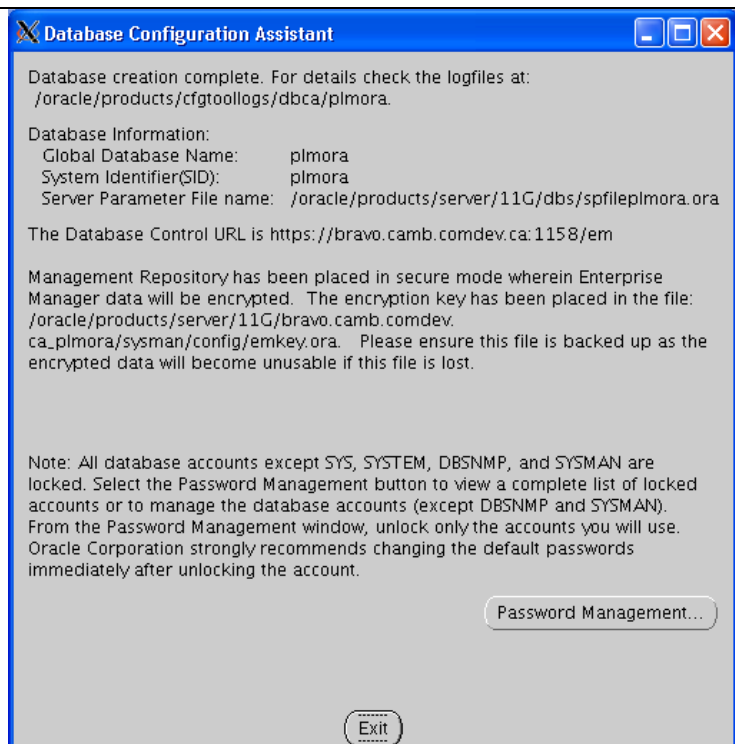
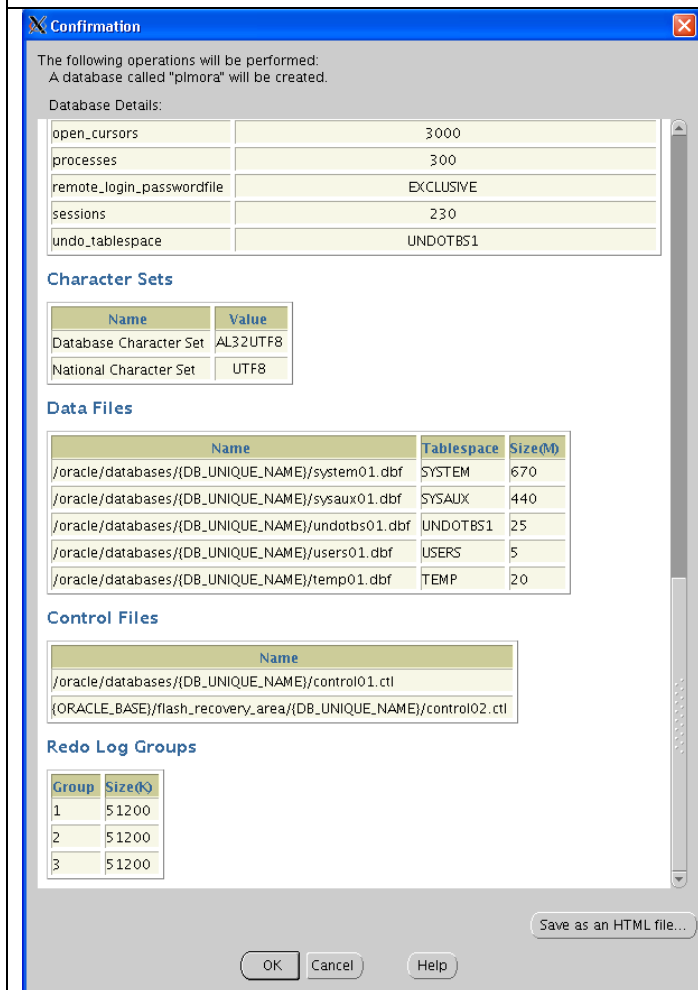
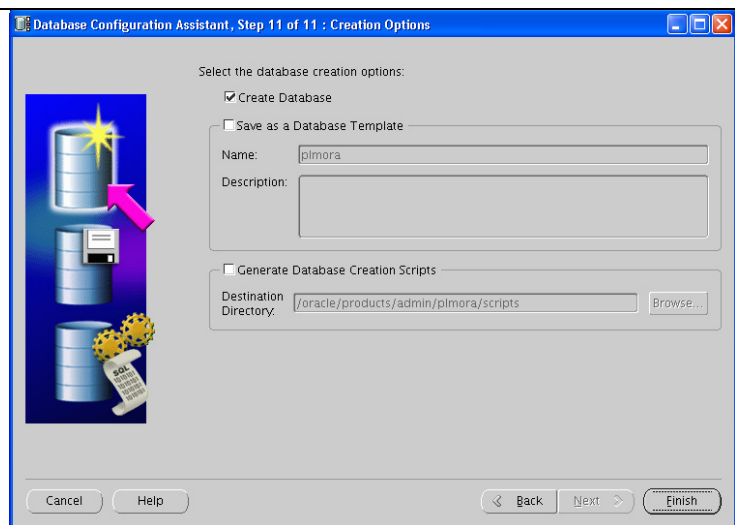
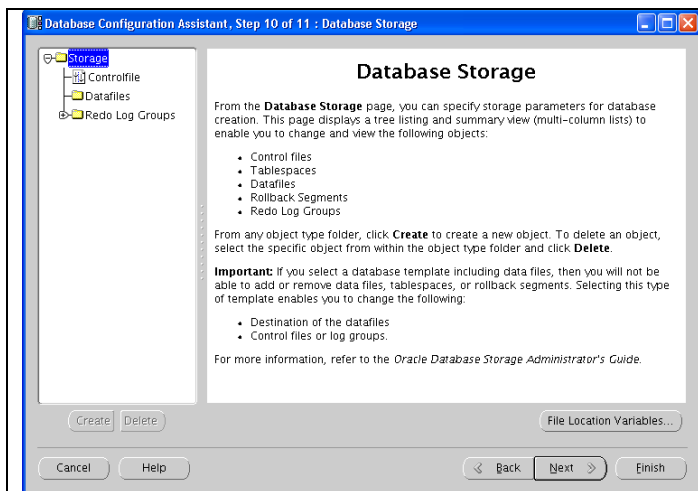
Shared Servers specifies the number of server processes that you want to create when an instance is started up.

Shared Server: []

Edit Shared Server Parameters...

All Initialization Parameters...

Cancel Help Back Next Finish



Install Oracle Client (optional, but required for WC 91 upgrade servers)

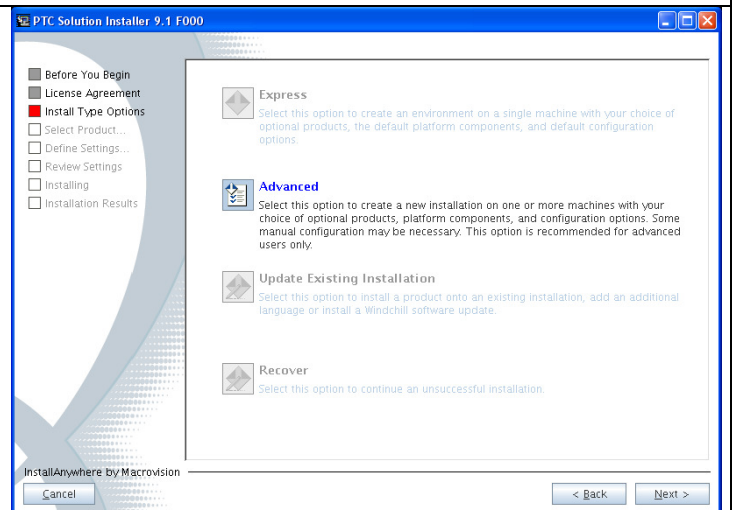
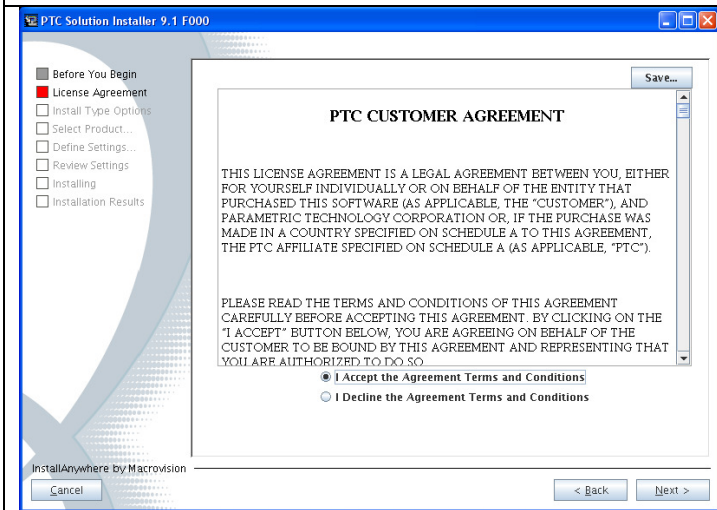
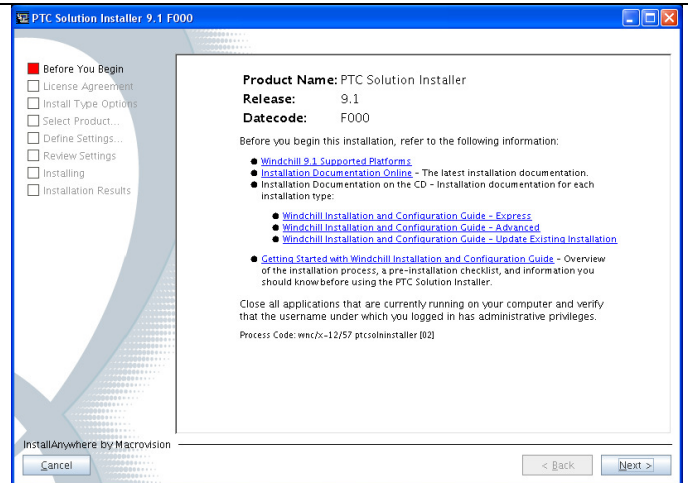
From a command prompt switch user as oracle from root

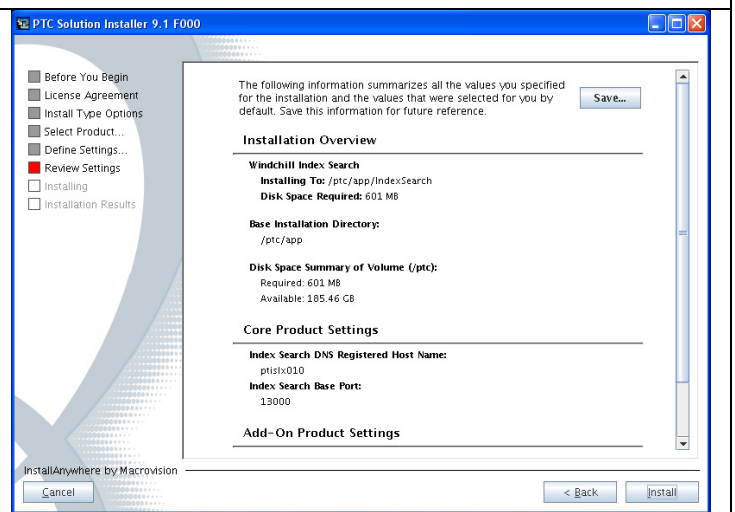
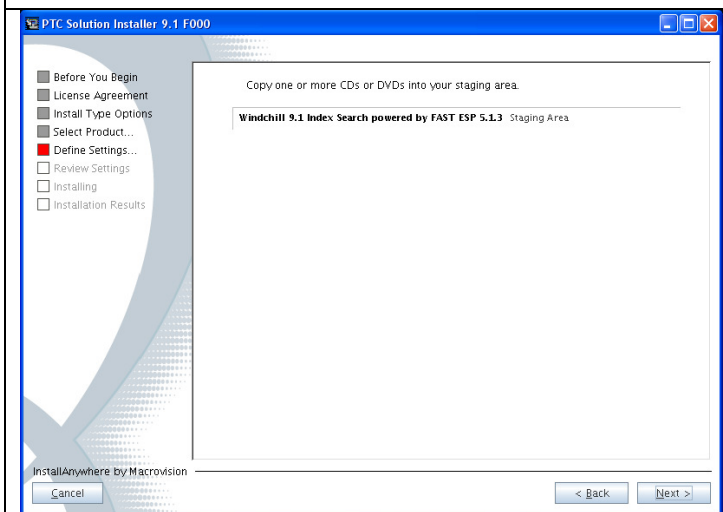
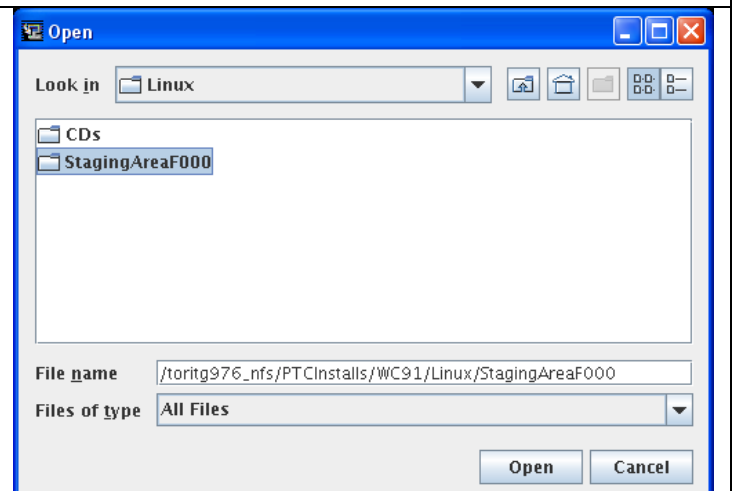
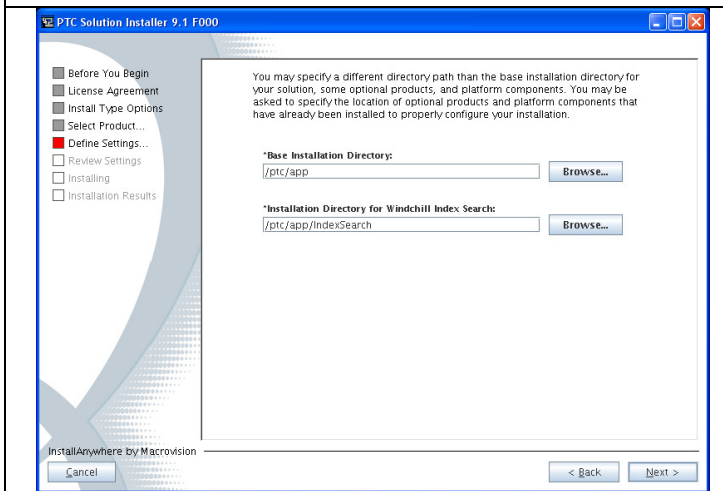
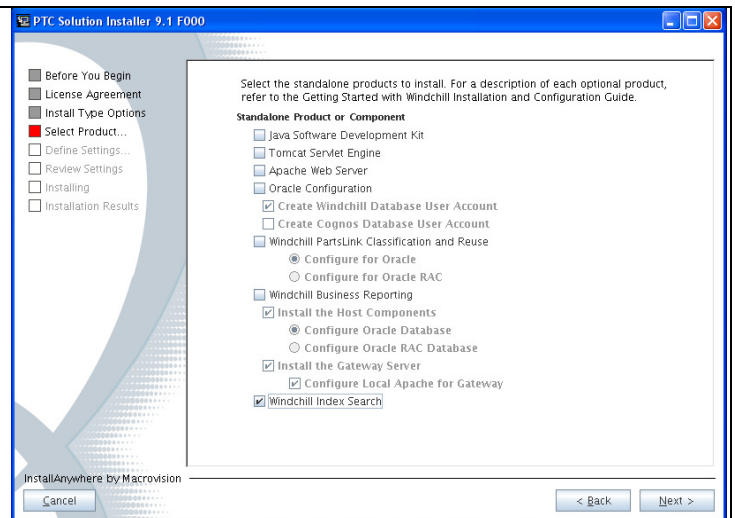
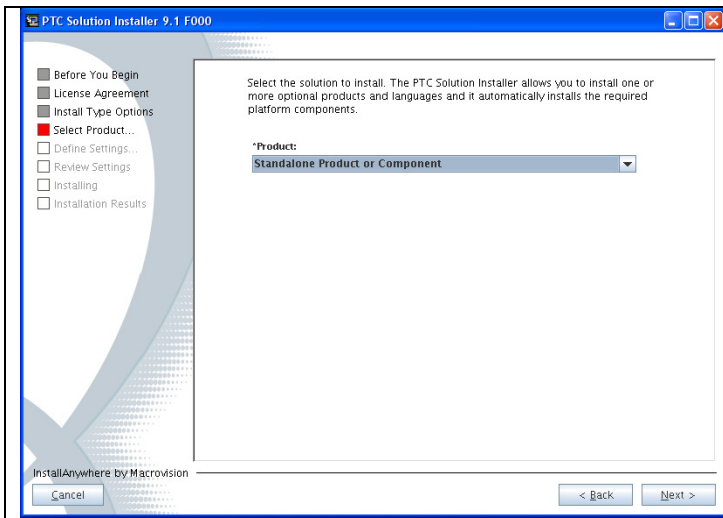
- su – oracle
- export your DISPLAY ie export DISPLAY=##.##.##:0.0
- we place the oracle installation CDs in the central mounted location /ptc/software/Oracle/Oracle10GClient/client

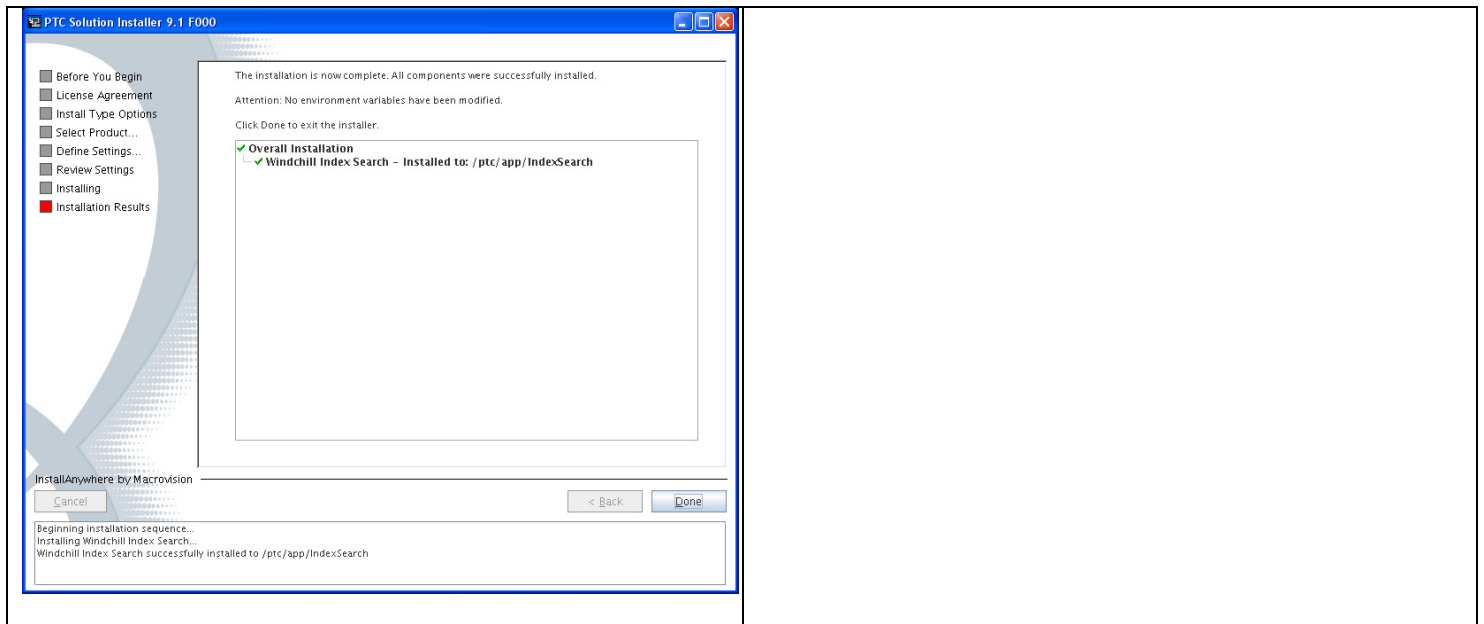
Install SearchIndex

From a command prompt switch user as instream from root

- o su – instream
- export your DISPLAY ie export DISPLAY=#.#.#:0.0
- run the PSI installer:
 - o /ptc/software/WC91/CDs/WC91_PSI_F000/setup
 - o Choose standalone components only
 - o Install searchindex only
 - o Copy the CD to a staging area to be used in the future installs of 91 F000:
§ /ptc/software/WC91/StagingF000







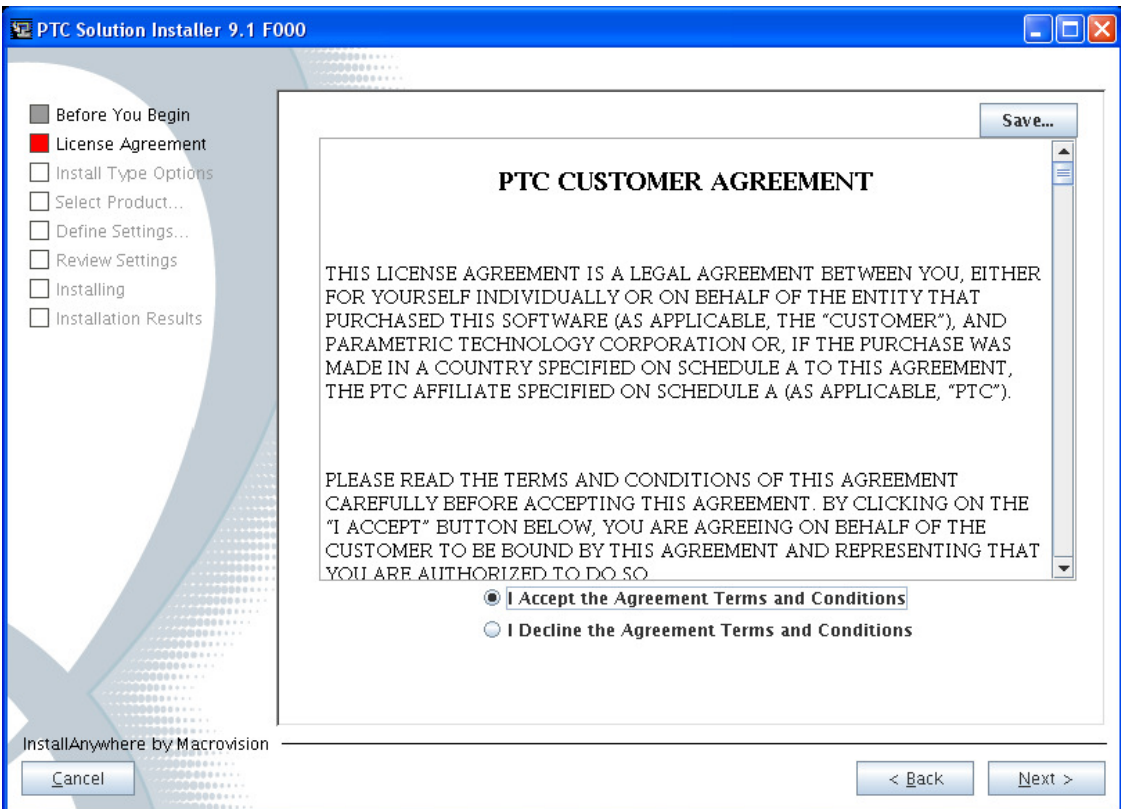
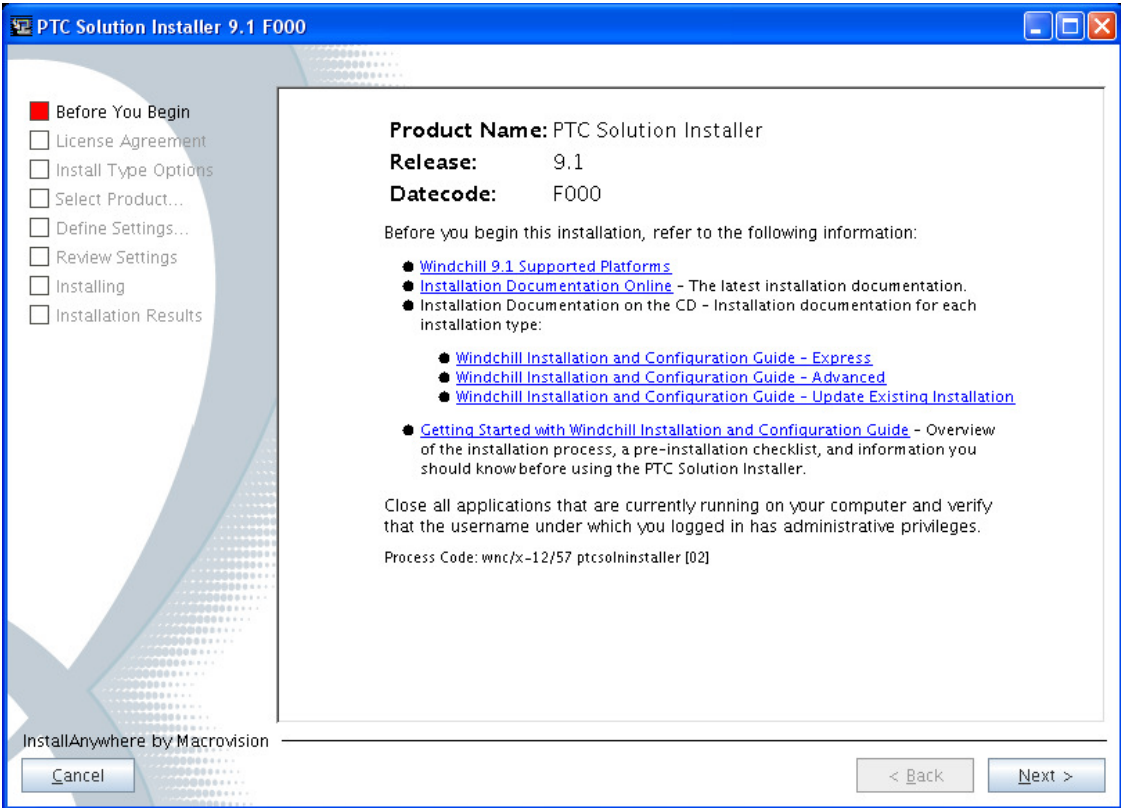
All Other Windchill Apps

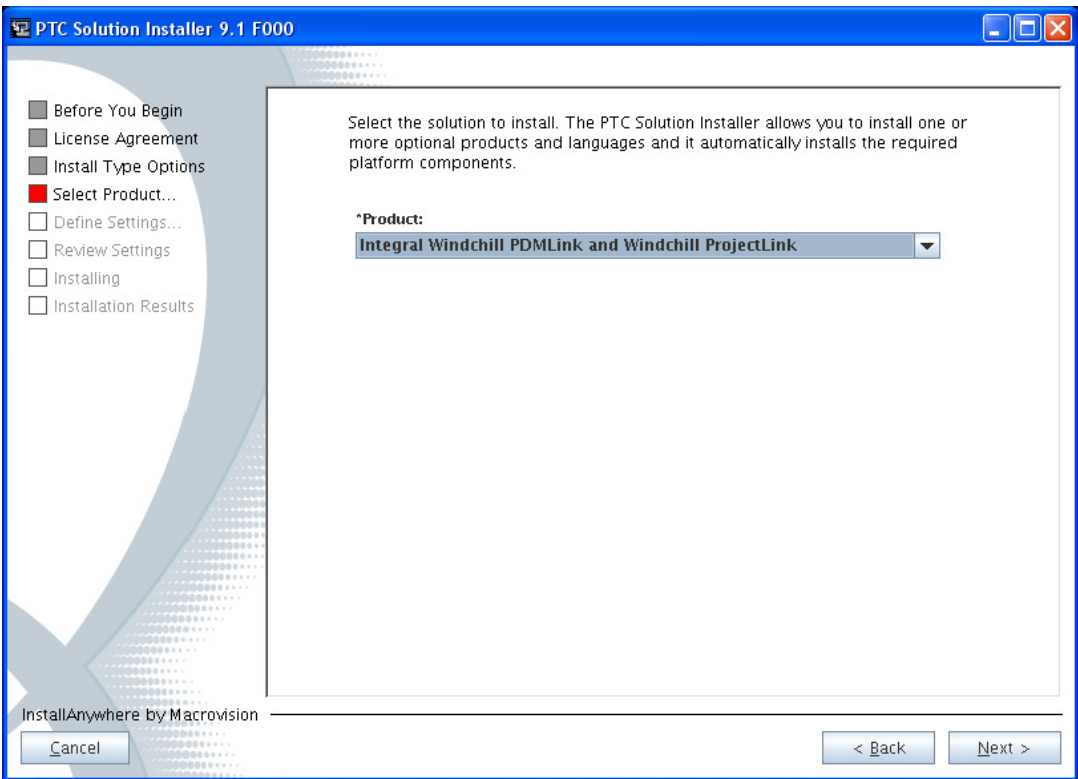
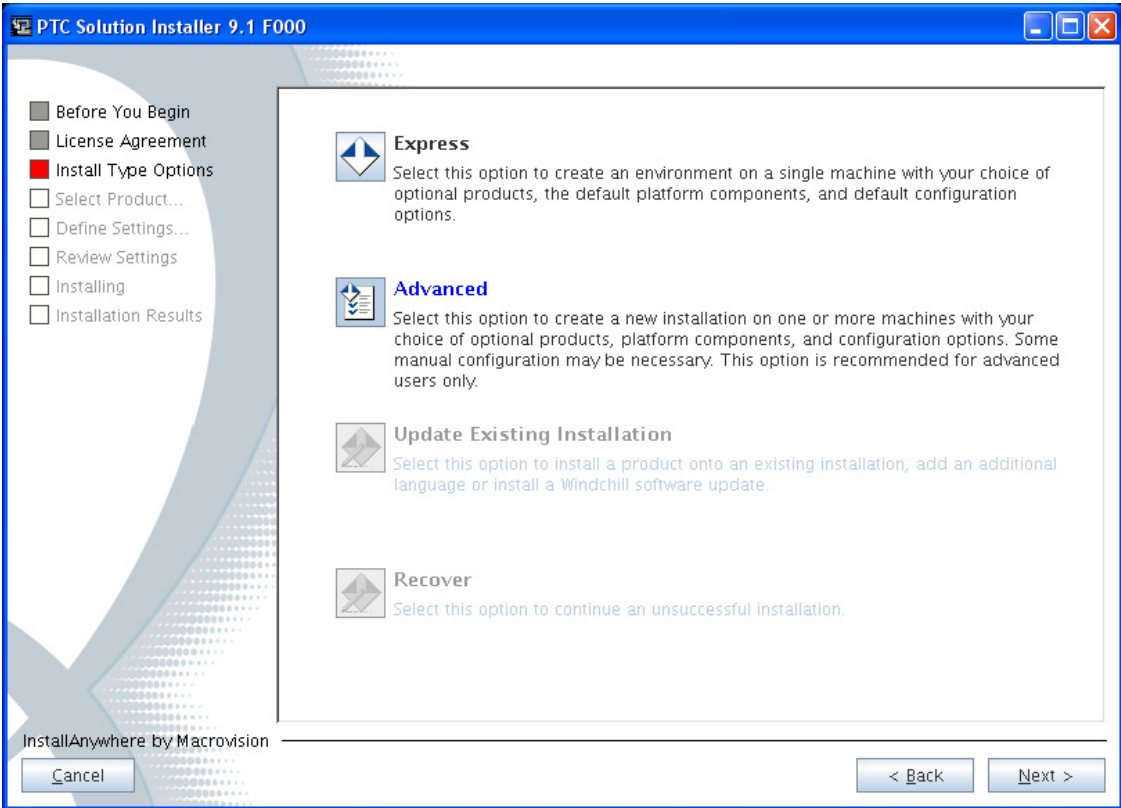
Install all other apps as root and owned as root:

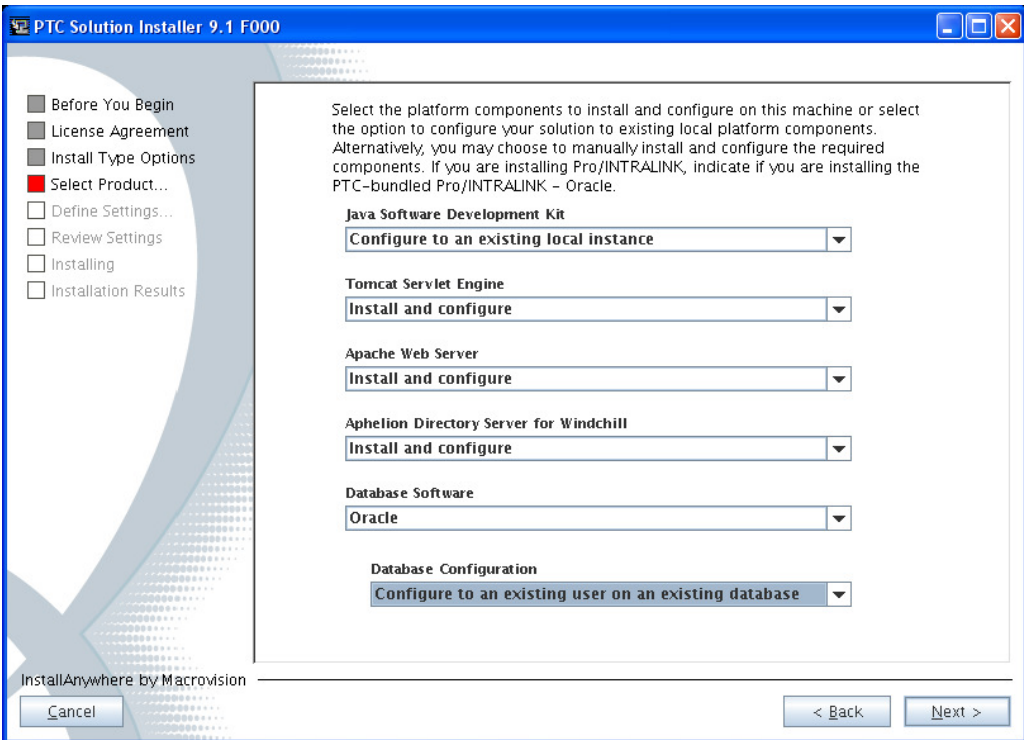
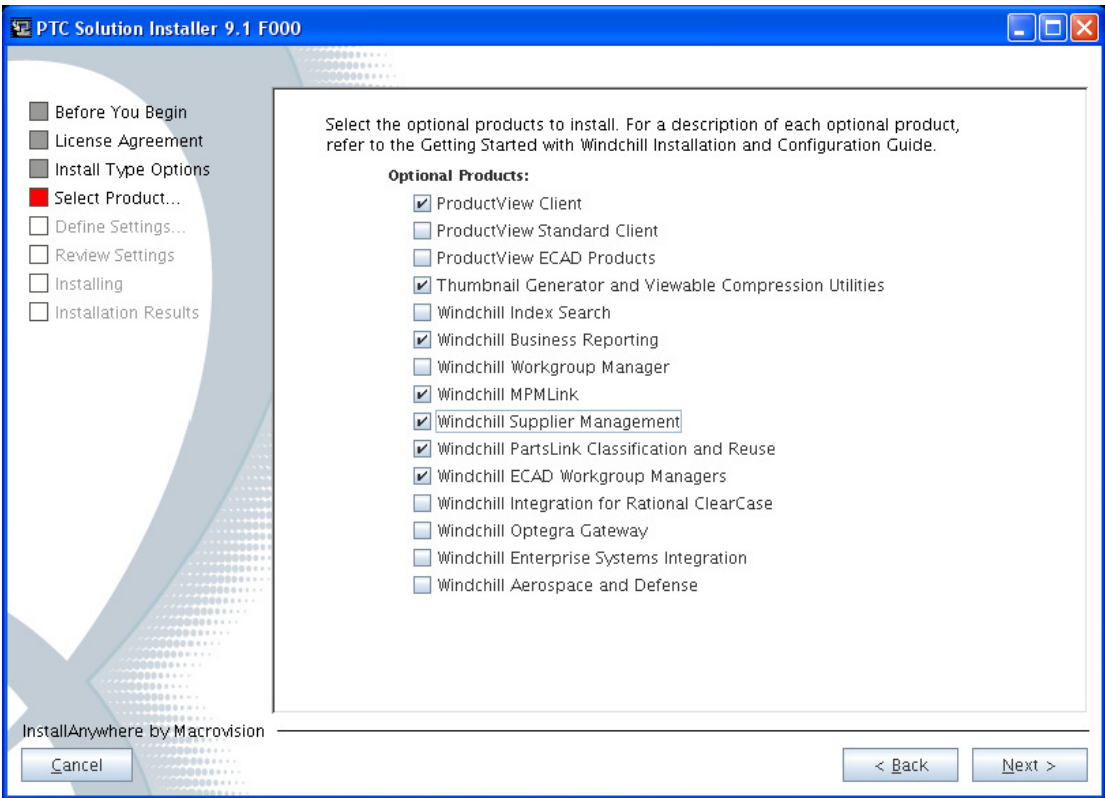
From a command prompt as root

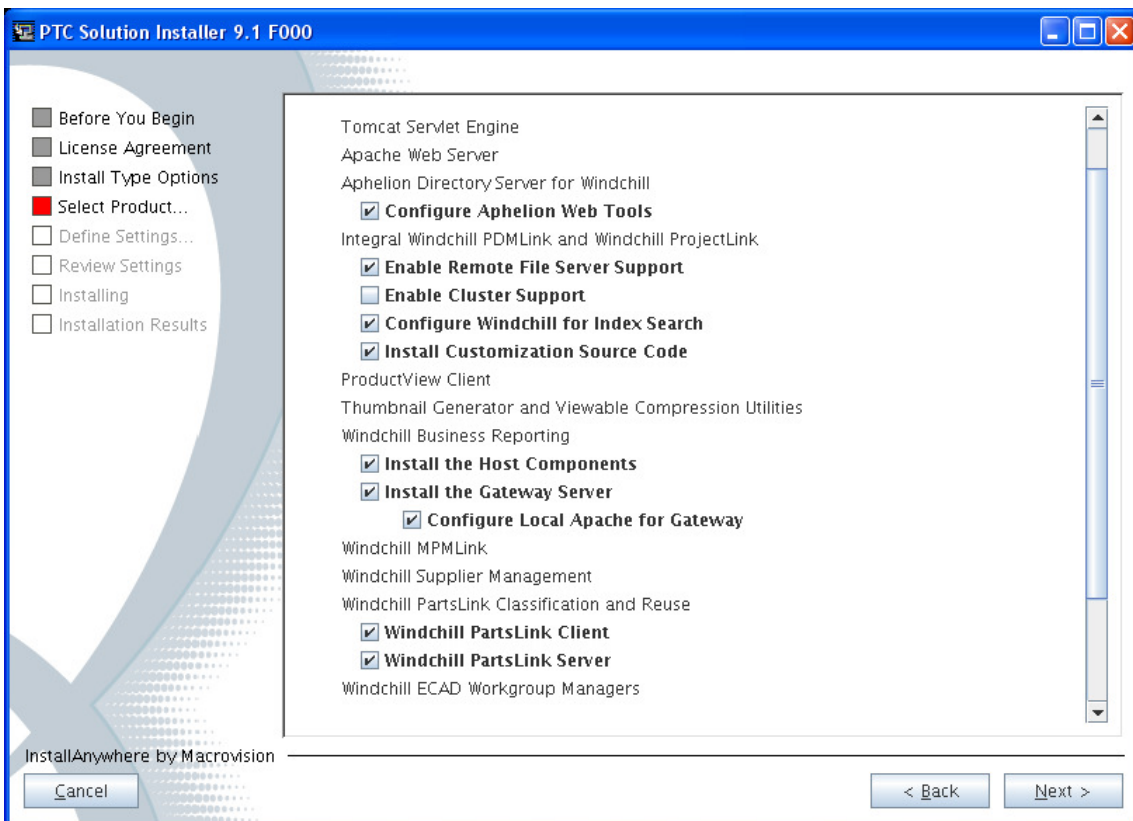
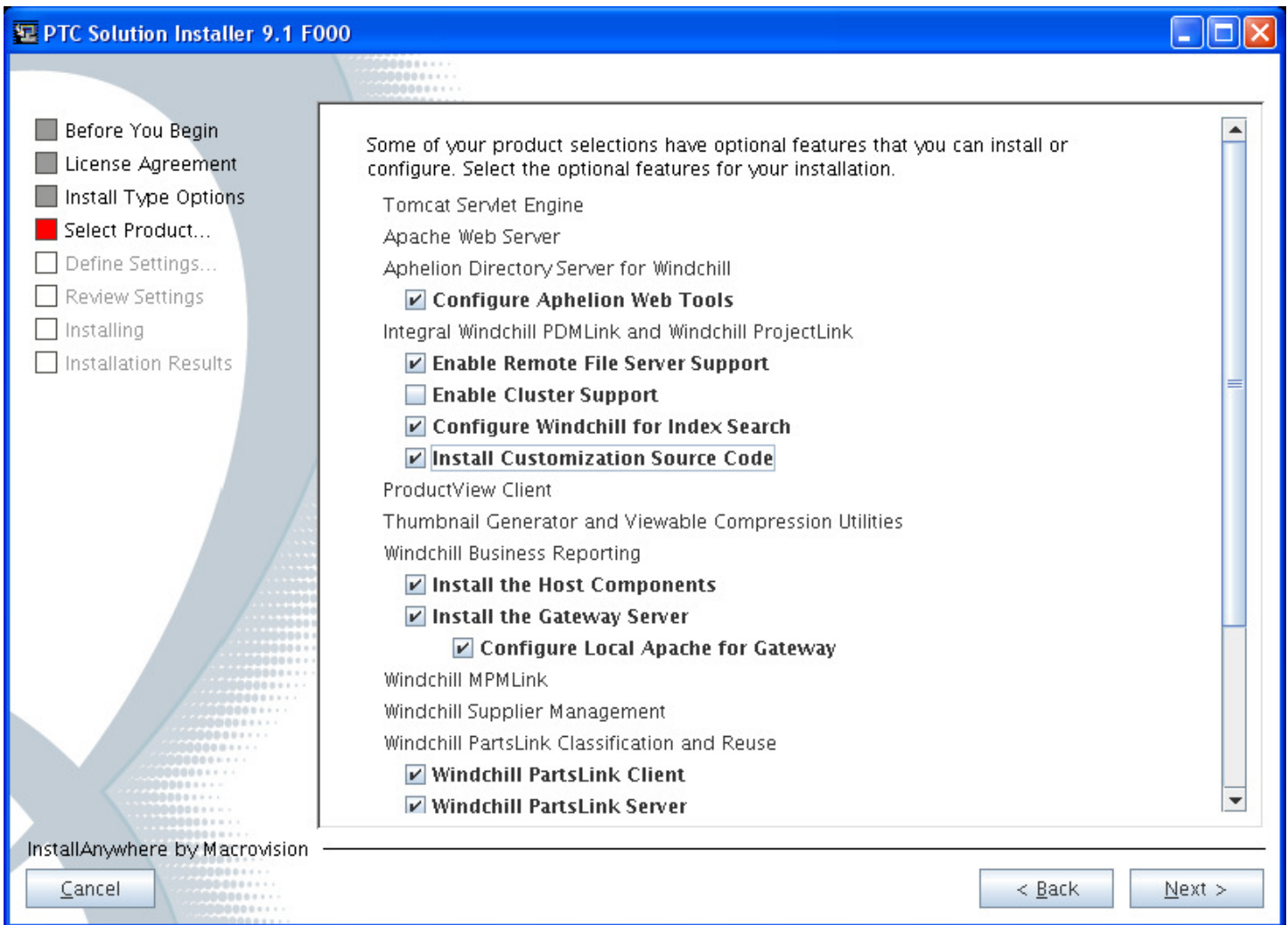
- export your DISPLAY ie export DISPLAY=.#.#.#:0.0
- run the PSI installer:
 - o /ptc/software/WC91/CDs/WC090_PSI_M050/setup
 - o Choose standalone components only
 - o Copy the CD to a staging area to be used in the future installs of 90 M050:
\$ /ptc/software/WC91/M050/Staging

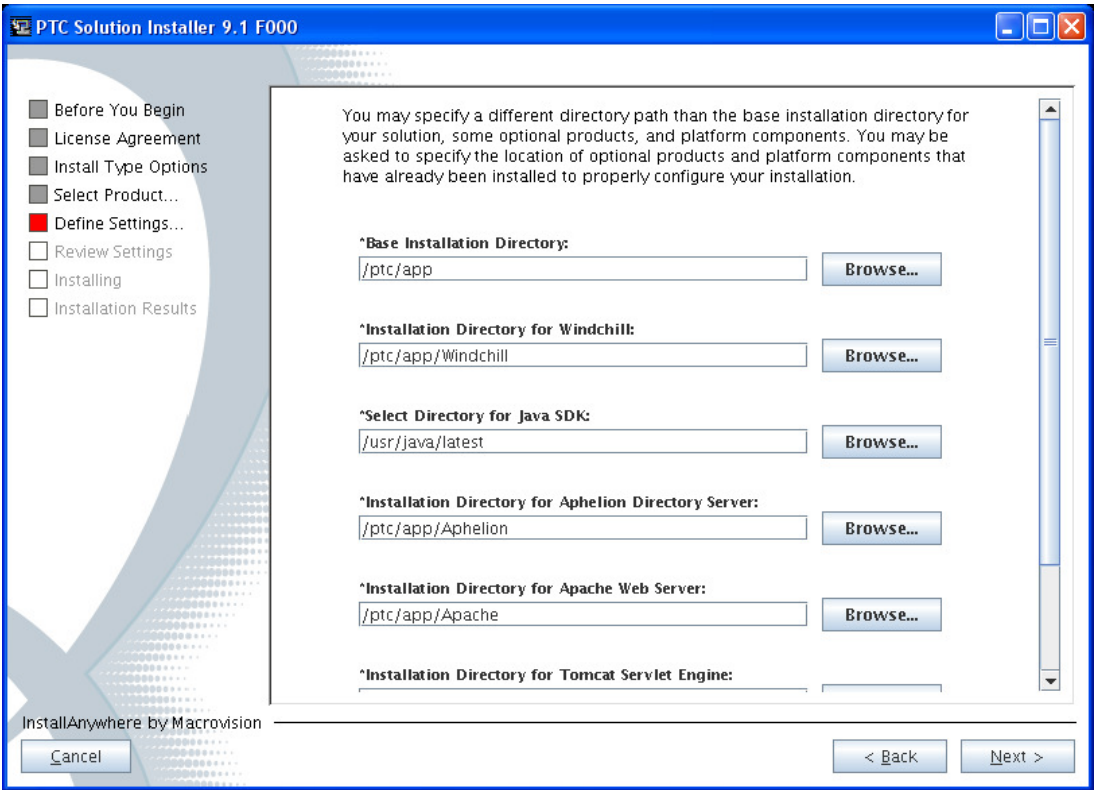
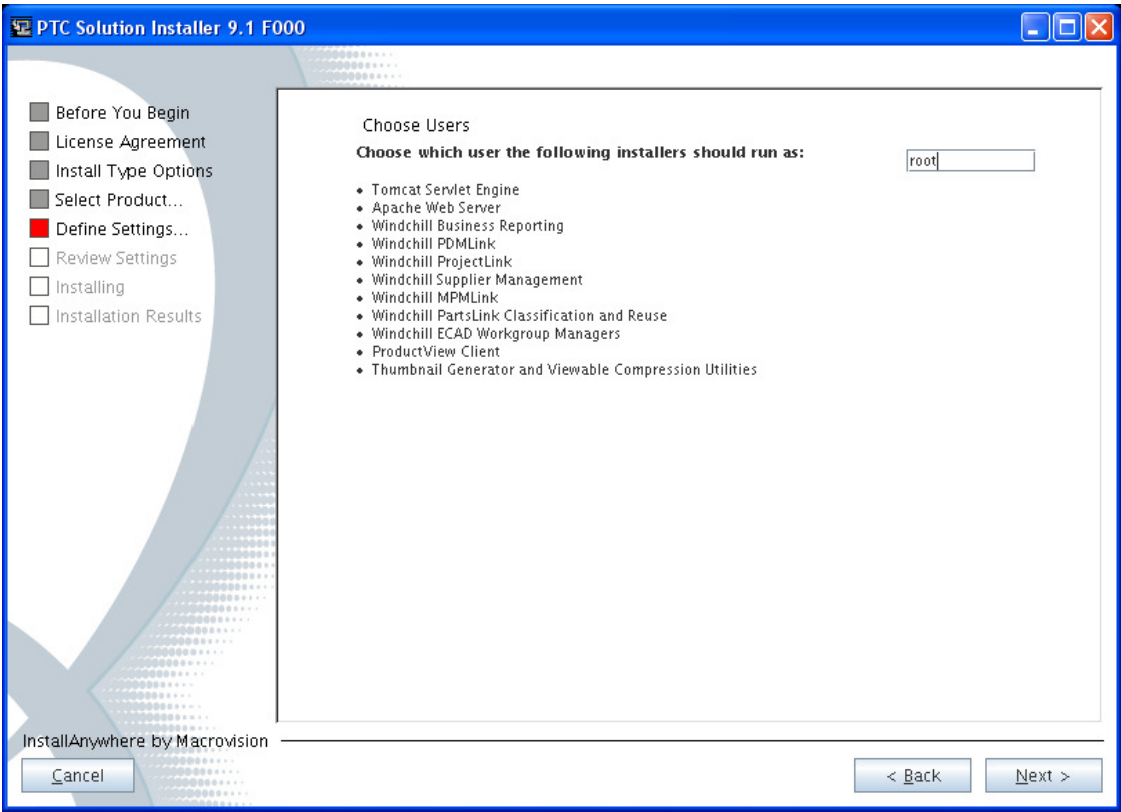


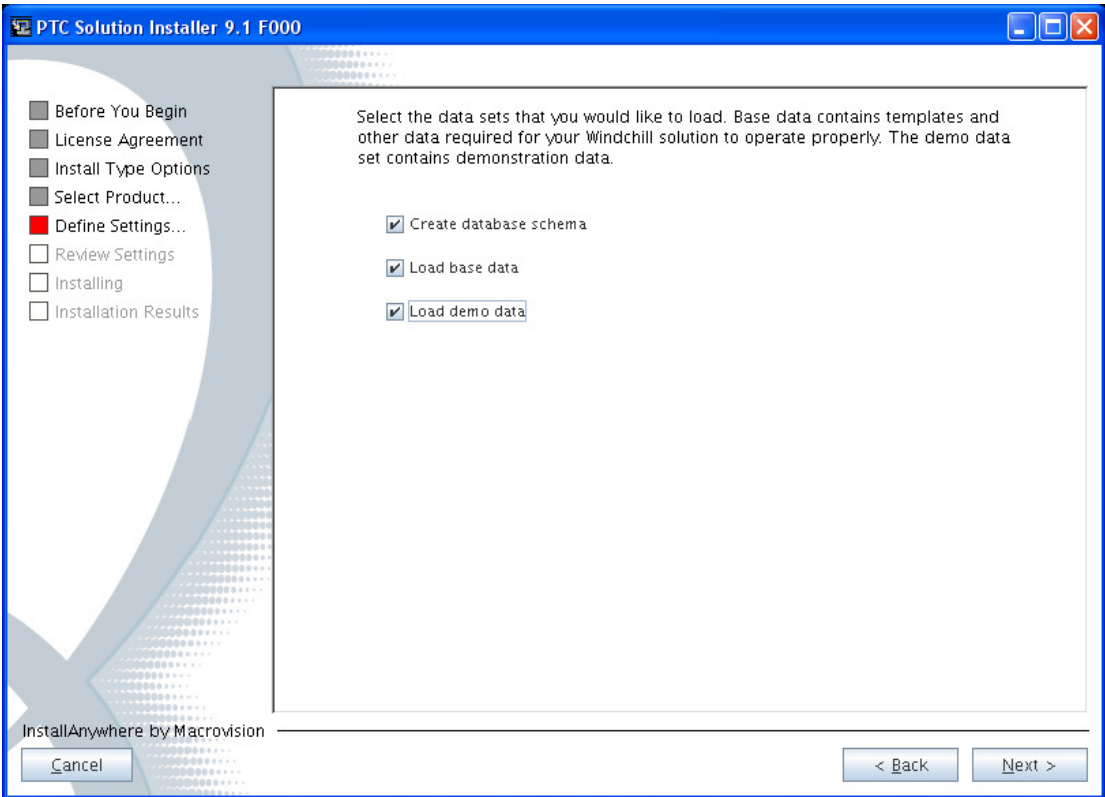
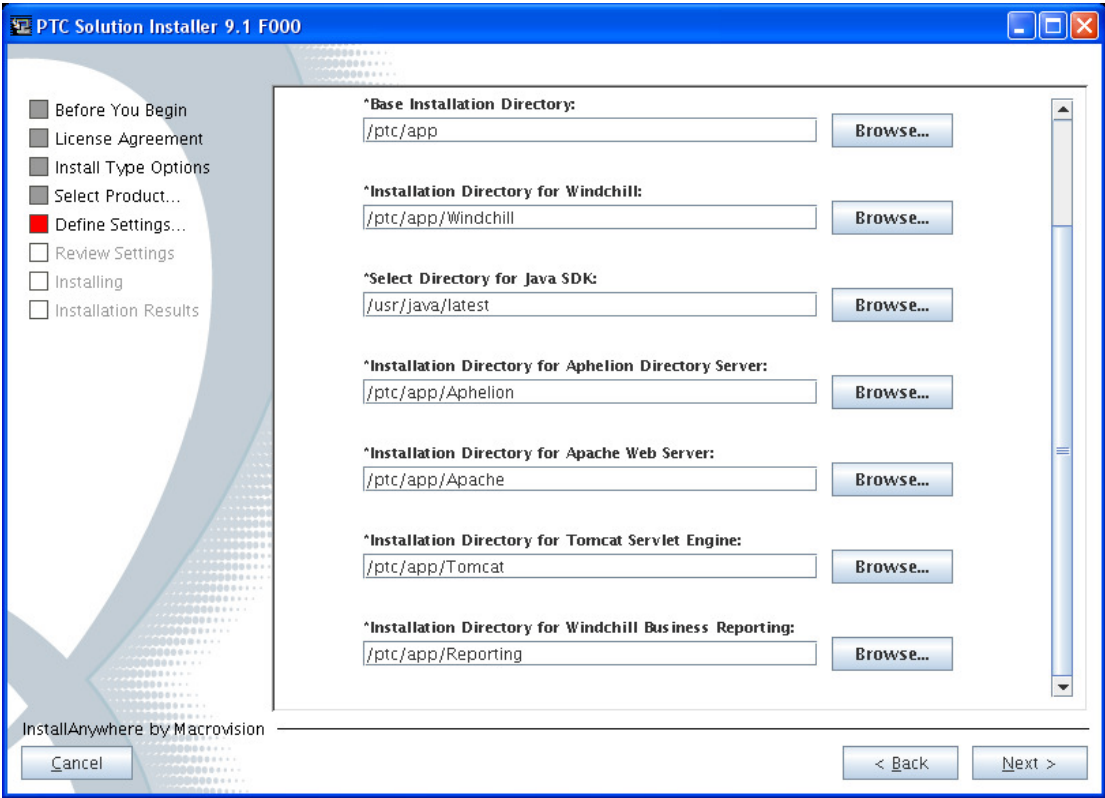












PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

Specify the e-mail address to receive Web Server messages, the fully qualified host name for your Web Server and the Servlet engine, and the appropriate port numbers for both.

***E-mail Address to Receive Web Server Messages:**
wcadmin@psionteklogix.com

***Web Server DNS Registered Host Name:**
ptislx010.ad.pSION.com

***HTTP Port Number:**
80

***HTTPS Port Number:**
443

***Servlet Engine Shutdown Port Number:**
8006

***Servlet Engine Web Server Listener Port Number:**
8010

***Servlet Engine DNS Registered Host Name:**
ptislx010.ad.pSION.com

InstallAnywhere by Macrovision

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

Select a language for base data which includes templates and rules, and one or more display languages for the user interface and documentation.

Base Data Language:
English

***Display Languages:**

- English
- French
- German
- Italian
- Spanish
- Japanese
- Korean
- Simplified Chinese
- Traditional Chinese

InstallAnywhere by Macrovision

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...**
- Review Settings
- Installing
- Installation Results

Extended character set storage is required for every language except English.

Enable extended character sets

*Oracle Database DNS Registered Host Name:
ptislx009.ad.pSION.com

*Oracle Database Listener Port Number:
1521

*Oracle Database System Identifier (SID):
ptislx10

*Oracle User Name for Windchill:
p010

*Oracle User Password for Windchill:
●●●●

*Windchill Business Reporting Oracle Database User Name for the Database User Account:
pcog010

*Windchill Business Reporting Oracle Database User Password for the Database User Account:
●●●●●●

InstallAnywhere by Macrovision

Cancel < Back Next >

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...**
- Review Settings
- Installing
- Installation Results

Specify the settings to access the Aphelion LDAP directory server. Specify the LDAP distinguished names for your Windchill solution to find your system properties, administrative users, and user definitions. All user entries can be stored in an enterprise LDAP.

*LDAP Server DNS Registered Host Name:
ptislx010.ad.pSION.com

*LDAP Port Number:
389

*Administrator Distinguished Name:
cn=Manager

*Administrator Password:
●●●●

*Confirm Administrator Password:
●●●●

*Base Distinguished Name for Product Properties:
cn=configuration,cn=Windchill_9.1,o=ptc

*Base Distinguished Name for Administrative Users:
ou=people,cn=AdministrativeLdap,cn=Windchill_9.1,o=ptc

*Base Distinguished Name for Enterprise Users:

InstallAnywhere by Macrovision

Cancel < Back Next >

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

InstallAnywhere by Macrovision

***LDAP Server DNS Registered Host Name:**
ptislx010.ad.pson.com

***LDAP Port Number:**
389

***Administrator Distinguished Name:**
cn=Manager

***Administrator Password:**
•••••

***Confirm Administrator Password:**
•••••

***Base Distinguished Name for Product Properties:**
cn=configuration,cn=Windchill_9.1,o=ptc

***Base Distinguished Name for Administrative Users:**
ou=people,cn=AdministrativeLdap,cn=Windchill_9.1,o=ptc

***Base Distinguished Name for Enterprise Users:**
ou=people,cn=EnterpriseLdap,cn=Windchill_9.1,o=ptc

Enable Separate Enterprise LDAP Server

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

internet domain will be used to create the initial organization for your solution.

InstallAnywhere by Macrovision

***Windchill Site Administrator:**
 Create New
 Use Existing Account

***Windchill Site Administrator User Name:**
wadmin

***Windchill Site Administrator Password:**
••••••

***Confirm Windchill Site Administrator Password:**
••••••

Select the Repository Where the Site Administrator is Stored:
 Administrative
 Enterprise

***Web Application Context Root:**
Windchill

***Info*Engine Server Task Processor Port Number:**
10002

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

InstallAnywhere by Macrovision

***Web Application Context Root:**
Windchill

***Info*Engine Server Task Processor Port Number:**
10002

***Initial Organization Name:**
Psion Teklogix Inc.

***Organization Internet Domain Name:**
ad.pSION.com

***Windchill Business Reporting Administrative User ID:**
wbradmin

***Windchill Business Reporting Administrative User Password:**
●●●●●●

***Confirm Password for Administrative User:**
●●●●●●

***Index Search DNS Registered Host Name:**
ptislx010.ad.pSION.com

***Index Search Base Port:**
13000

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

Specify optional product settings.

InstallAnywhere by Macrovision

***Windchill Business Reporting Gateway Machine's DNS Registered Host Name:**
ptislx010.ad.pSION.com

***Windchill Business Reporting Gateway Machine's Web Server Port:**
80

***Mapped location of Windchill Business Reporting Host installation (leave empty if locally installed)**

***DNS Registered Host Name of the Windchill Business Reporting Host:**
ptislx010.ad.pSION.com

***Communication Port of the Windchill Business Reporting Host:**
9300

***Location of the Windchill Business Reporting installation as seen by the Windchill Business Reporting Host:**
/ptc/app/Reporting

PTC Solution Installer 9.1 F000

- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

InstallAnywhere by Macrovision

***Mapped location of Windchill Business Reporting Host installation (leave empty if locally installed)**

***DNS Registered Host Name of the Windchill Business Reporting Host:**

***Communication Port of the Windchill Business Reporting Host:**

***Location of the Windchill Business Reporting installation as seen by the Windchill Business Reporting Host:**

ProductView Client

- Interactive 3D Thumbnails
- Visual Structure Navigation
- Make client available

Enter RMI Registry Port for Windchill PartsLink Server

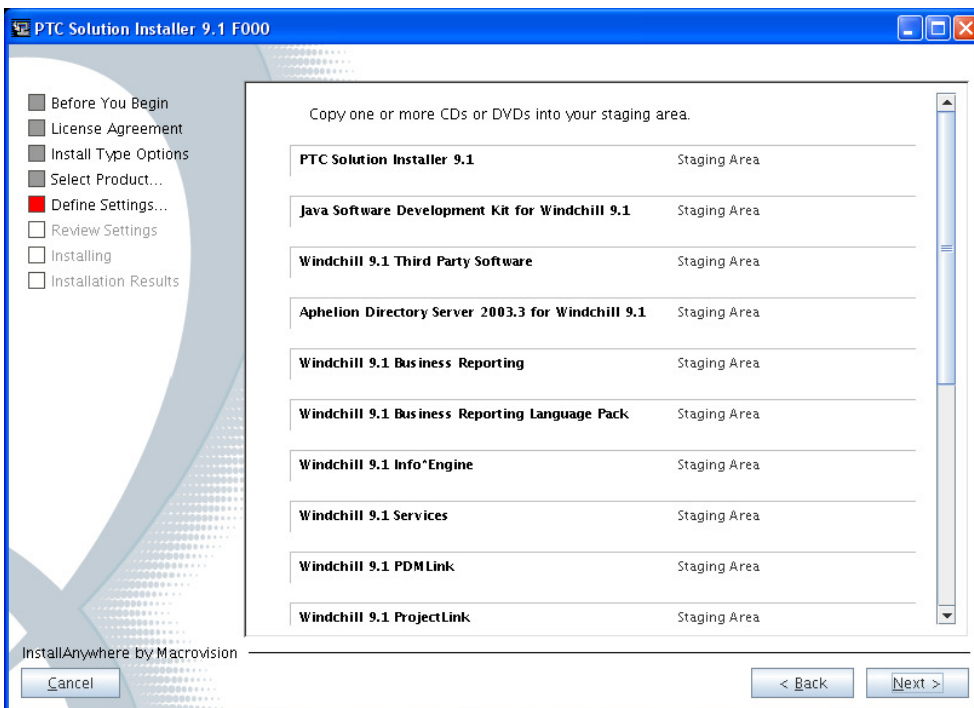
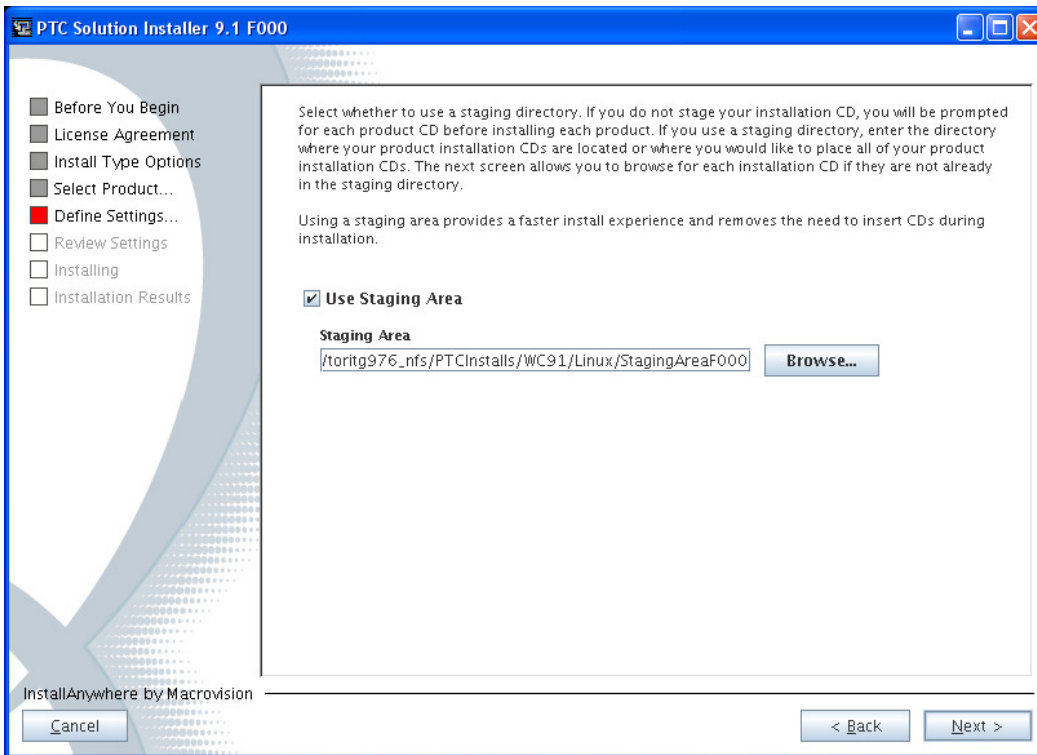
PTC Solution Installer 9.1 F000

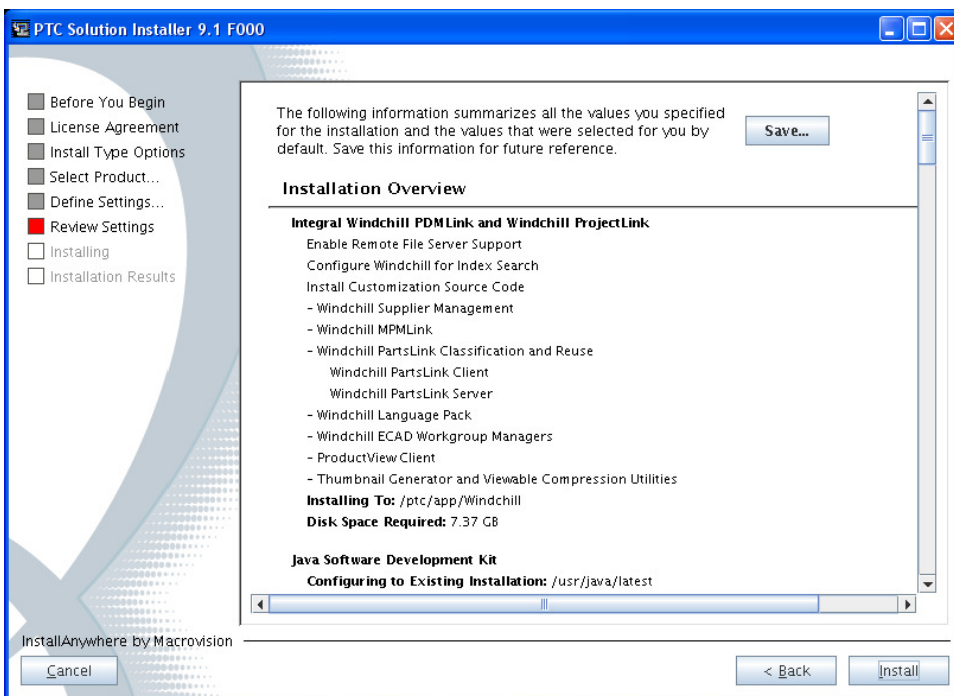
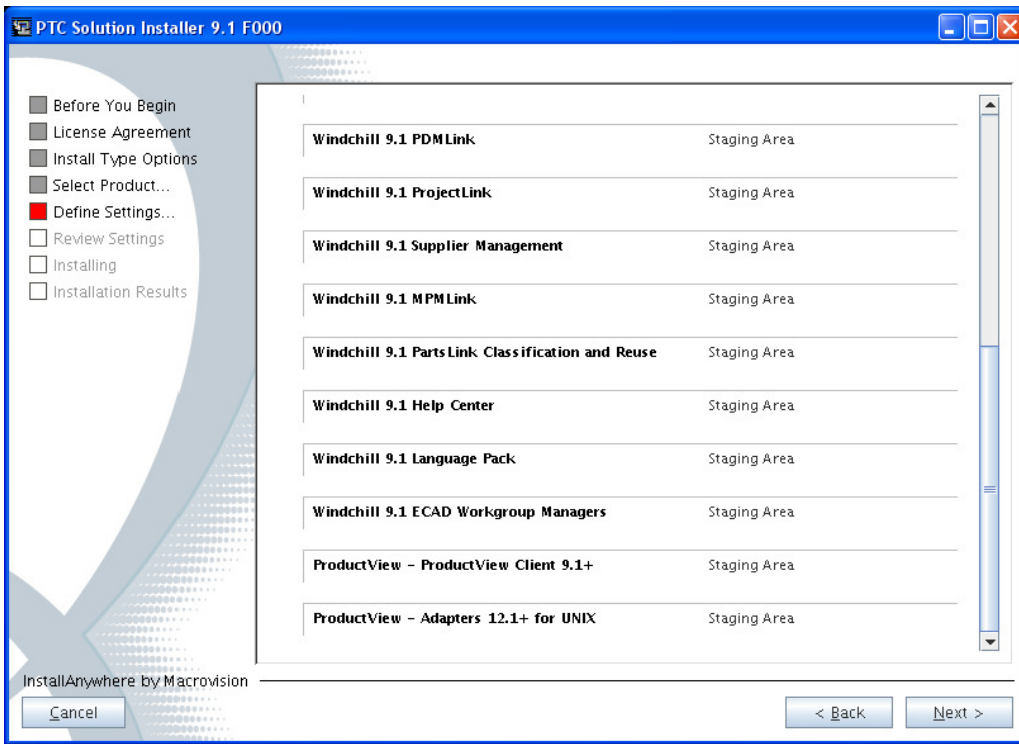
- Before You Begin
- License Agreement
- Install Type Options
- Select Product...
- Define Settings...
- Review Settings
- Installing
- Installation Results

InstallAnywhere by Macrovision

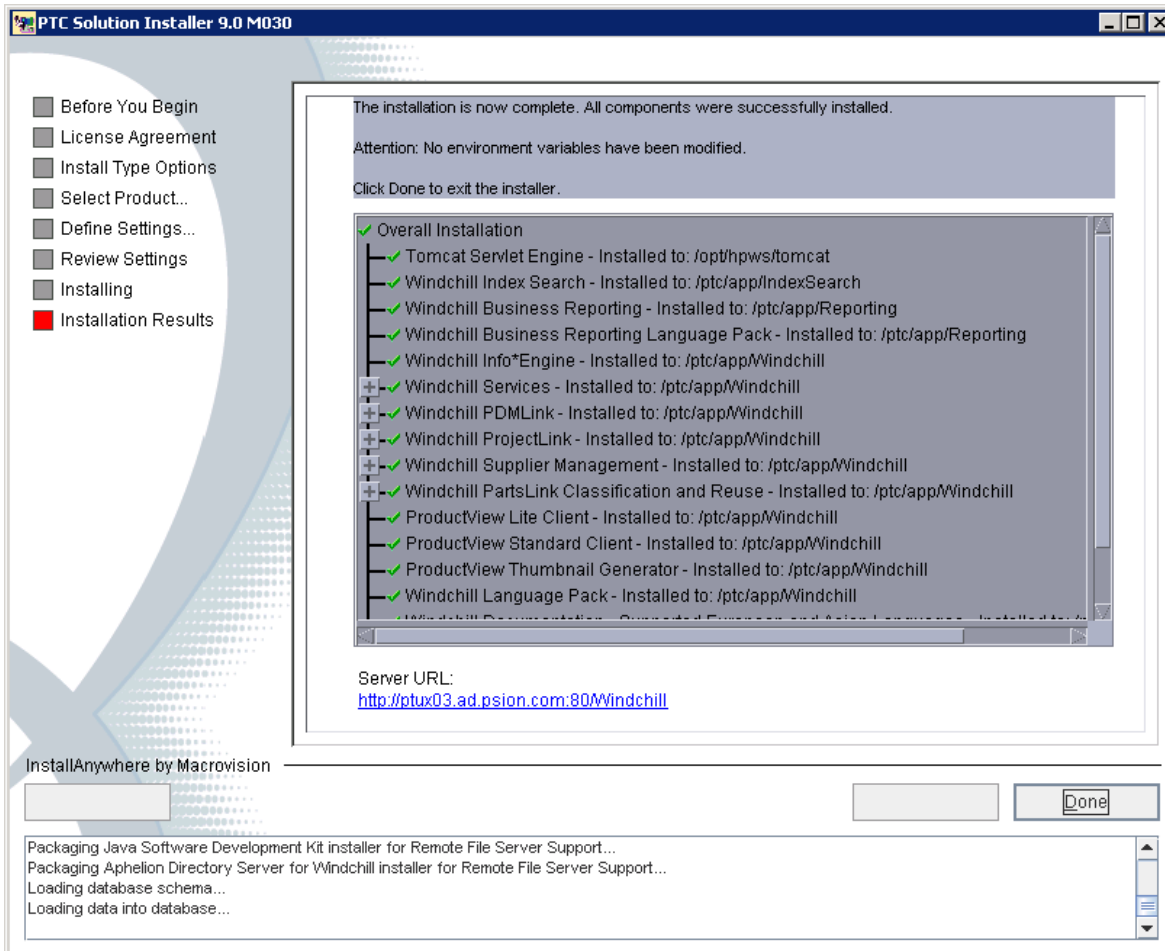
Specify where to create links.

- In your home folder
- O**ther:
- Don't t create links





If all is successful, you should have this window at the end.



As root system user, change ownership of all the following directories to wcaadmin:wcaadmin:

- /ptc/Apache
- /ptc/Tomcat
- /ptc/installer
- /ptc/Windchill
- /ptc/links
- /ptc/Reporting

Start and Stop

- Make sure you stop everything:
 - if you have no links or environment paths use the following:
 - As wcadmin system user with export DISPLAY
 - /ptc/Windchill/partslink/bin/PL_stop.sh
 - /ptc/Windchill/bin/windchill stop
 - /ptc/Tomcat/bin/wttomcat_stop
 - /ptc/Reporting/bin/cogconfig.sh
 - This will open a cognos UI to change oracle user settings and manage the service
 - As instream system user
 - /ptc/IndexSearch/InStream_5.1/instream/nctrl stop
 - As root user
 - Apache
 - /ptc/Apache/bin/apachectl stop
 - Aphelion
 - /ptc/Aphelion/instTemp/cdsDaemon stop
 - Check for any running processes
 - ps -ef | grep java
 - ps -ef | grep httpd
 - ps -ef | grep www
 - ps -ef | grep wcadmin
 - ps -ef | grep instream
 - Kill -9 any process that were started based on time and date when you started the applications. ALWAYS CHECK WITH YOUR SYSTEM ADMIN if you are not familiar.
- Make sure you start everything is in reverse order:
 - As root user
 - Aphelion
 - /ptc/Aphelion/instTemp/cdsDaemon start
 - Apache
 - /ptc/Apache/bin/apachectl start
 - As instream system user
 - /ptc/IndexSearch/InStream_5.1/instream/nctrl start
 - As wcadmin system user with export DISPLAY
 - /ptc/Reporting/bin/cogconfig.sh
 - This will open a cognos UI to change oracle user settings and manage the service and select the start button
 - /ptc/Windchill/bin/windchill start
 - nohup /ptc/Windchill/partslink/bin/PL_stop.sh & (without nohup the process may not run as a background)
 - /ptc/Tomcat/bin/wttomcat_start

Creating start and stop scripts:

Example

```
/usr/bin/su - wtadmin -c "/ptc/Windchill/bin/windchill stop" > /tmp/WC91Stop.log 2>&1
```

To turn off xterms, (should do this after the initial dataload)

- As wadmin system user, Modify or add the /ptc/Windchill/site.xconf

```
<!-- Managers with NO XTERMs Properties -->
```

```
<Property name="wt.manager.cmd.ServerManager.java.command" overridable="true"
  targetFile="codebase/wt.properties"
  value="\$(wt.java.cmd.quoted) \$(wt.manager.cmd.common.java.args) -Dlog4j.configuration=\$(wt.manager.log4j.config)
\$(wt.manager.cmd.ServerManager.jmx.args) \$(wt.manager.cmd.ServerManager.debug.args) -Xms\$(wt.manager.minHeap)m -Xrs -
Xmx\$(wt.manager.maxHeap)m \$(wt.manager.cmd.ServerManager.java.extra.args) wt.manager.ServerManagerMain"/>
```

```
<Property name="wt.manager.cmd.MethodServer.java.command" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="\$(wt.java.cmd.quoted) \$(wt.manager.cmd.common.java.args) -Dlog4j.configuration=\$(wt.method.log4j.config)
```

```
\$(wt.manager.cmd.MethodServer.jmx.args) \$(wt.manager.cmd.MethodServer.debug.args) -Xrs -Xms\$(wt.method.minHeap)m -
```

```
Xmx\$(wt.method.maxHeap)m \$(wt.manager.cmd.MethodServer.platform.java.args) \$(wt.manager.cmd.MethodServer.java.extra.args)
```

```
wt.method.MethodServerMain"/>
```

- run the following command
xconfmanager -p

Some Windchill Performance Tuning:

- Windchill
 - As wadmin system user, Modify or add the /ptc/Windchill/site.xconf

```
<!-- Server Manager Tuning -->
```

```
<Property name="wt.manager.cmd.ServerManager" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="\$(wt.manager.cmd.ServerManager.java.command)"/>
```

```
<Property name="wt.manager.minHeap" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="128"/>
```

```
<Property name="wt.manager.maxHeap" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="256"/>
```

```
<!-- MethodServer Manager Tuning-->
```

```
<Property name="wt.manager.cmd.MethodServer" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="\$(wt.manager.cmd.MethodServer.java.command)"/>
```

```
<Property name="wt.manager.monitor.start.MethodServer" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="1"/>
```

```
<Property name="wt.method.minHeap" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="3072"/>
```

```
<Property name="wt.method.maxHeap" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="4096"/>
```

```
<!-- Background MethodServer Tuning -->
```

```
<Property name="wt.queue.executeQueues" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="true"/>
```

```
<Property name="wt.manager.monitor.services" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```
  value="MethodServer"/>
```

```
<Property name="wt.manager.monitor.start.BackgroundMethodServer" overridable="true"
```

```
  targetFile="codebase/wt.properties"
```

```

        value="0"/>
<Property name="wt.manager.cmd.BackgroundMethodServer" overridable="true"
    targetFile="codebase/wt.properties"
    value="\$(wt.manager.cmd.MethodServer) wt.method.serviceName=BackgroundMethodServer
wt.queue.executeQueues=true wt.queue.queueGroup=default wt.adapter.enabled=false wt.method.minPort=3000
wt.method.log.file=\$(wt.logs.dir)\$(dir.sep)BackgroundMethodServer.log"/>
<Property name="wt.workflow.engine.userWorkPoolSize" overridable="true"
    targetFile="codebase/wt.properties"
    value="15"/>
<Property name="wt.workflow.engine.propagationPoolSize" overridable="true"
    targetFile="codebase/wt.properties"
    value="15"/>
<Property name="wt.queue.max.processQueues" overridable="true"
    targetFile="codebase/wt.properties"
    value="200"/>
<Property name="wt.workflow.engine.dedicatedQueueMode" overridable="true"
    targetFile="codebase/wt.properties"
    value="both"/>
<Property name="wt.queue.execEntriesCount" overridable="true"
    targetFile="codebase/wt.properties"
    value="100"/>
<Property name="wt.queue.max.scheduleQueues" overridable="true"
    targetFile="codebase/wt.properties"
    value="200"/>

```

- run the following command
xconfmanager -p

- Tomcat:

- Modify the /ptc/Tomcat/bin/wttomcat_start

- Was:

- setenv JAVA_OPTS "-server -XX:PermSize=36M -XX:MaxPermSize=128M -Xms64M -Xmx128M -Djava.awt.headless=true -Dwt.context.defaultLocalResourcesOnly=true"

- Changed to:

- setenv JAVA_OPTS "-server -XX:PermSize=36M -XX:MaxPermSize=128M -Xms3072M -Xmx4096M -Djava.awt.headless=true -Dwt.context.defaultLocalResourcesOnly=true"

- To turn on 2 Method Servers and 1 BackGroundMethodServer **(do not perform this prior to initial dataload):**

- Modify the site.xconf according to the following:

```

<Property name="wt.manager.monitor.start.MethodServer" overridable="true"
    targetFile="codebase/wt.properties"
    value="2"/>
<Property name="wt.queue.executeQueues" overridable="true"
    targetFile="codebase/wt.properties"
    value="false"/>
<Property name="wt.manager.monitor.services" overridable="true"
    targetFile="codebase/wt.properties"
    value="MethodServer BackgroundMethodServer"/>
<Property name="wt.manager.monitor.start.BackgroundMethodServer" overridable="true"
    targetFile="codebase/wt.properties"
    value="1"/>

```


- As wadmin system user, run the following command
xconfmanager -p

Possible Installation Failures:

- Search Index
 - As instream OS user run this command and make sure you have export DISPLAY
/ptc/IndexSearch/InStream_5.1/oeminstaller/bin/ setup_Linux.bin
 - Follow the default UIs and make sure you point the installation folder/file to:
/ptc/IndexSearch/InStream_5.1/instream
 - Start IndexSearch
/ptc/IndexSearch/InStream_5.1/instream/nctrl start
 - To stop IndexSearch (optional)
/ptc/IndexSearch/InStream_5.1/instream/nctrl stop
- If the installer fails due to database:
 - Make sure you have an oracle client installed on the Windchill system with tnsnames set correctly to your database where ever it is.
 - From a unix command prompt logged in as wcadmin
 - Change directory to \$WT_HOME/db/sql
 - Run:

```
sqlplus <wc_dbuser>/<wc_dbuserpassword>@<SID>
```

 - @create_ddl_wt;
 - @ptl/PartsLinkService/Make_module_PartsLinkService.sql (optional if you have PartsLink)
 - @suma/SupplierManagement/Make_module_SupplierManagement.sql (optional if you have Supplier Management)
 - Commit
 - Exit
 - Start the entire windchill system
 - As wcadmin, run this command from a command prompt with exported DISPLAY:
 - windchill wt.load.WindchillLoader -All -Unattended -IncludeDemo (-IncludeDemo is only for test systems)