3.1.1.1 UC2: Install a [Componentized] Offering

Brief Description

User installs an offering using an interactive install.

Actors

1. User.

UC2 Basic Flow

Unless otherwise noted, a user action initiates an advance to the next step in the flow (for example, by clicking Next, pressing Enter, and so on.).

Preconditions

1. User logs onto system with authority to install the offering.
2. User accepts all defaults
3. There are no dependency issues or errors

UC2B.0: User initiates the install of an offering. System automatically proceeds to next step.

UC2B.1: System presents a list of languages available for use during installation. (If applicable, the product language files to install will be chosen later.). Language selection should default to the system locale, if applicable. User chooses language for the install.

UC2B.2: System presents progress while preliminary checks and initialization are performed. This step may involve multiple progress bars. System automatically proceeds to next step.

UC2B.3: System presents welcome message for product installation.

UC2B.4: System presents the license agreement and user accepts.

UC2B.5: System presents options to install only, create response file only or install and create a response file. User takes default action of install only without creating a response file.

UC2B.6: System presents progress while dependency checks are performed. System automatically proceeds to next step.

UC2B.7: System presents choices of installation type. User accepts default. In most cases, the default will be labeled Typical (if only some of the features are being installed) or Full (if all of the features are being installed). This step can also be replaced with install roles (UC2A30).

UC2B.8: System presents installation directory with the option to change it. User accepts default directory.

UC2B.9: System presents progress while dependency checks for features are performed. System automatically proceeds to next step.

UC2B.10: System presents summary screen that states what will be installed. User initiates install.

UC2B.11: System presents progress while install proceeds. System automatically proceeds to next step.

UC2B.12: System presents message that install was successful.

UC2 Alternative Flows

UC2A1. User does not have authority to install.

Previous step: UC2B.6.

UC2A1.1: System presents error message to user stating that user does not have authority to run install, but can create a response file, which can be silently installed by a user with authority.

UC2A1.2: System presents option to create a response file. User can choose response file and perform a silent install when logged in with proper authority.

Next step: UC2B.6.

UC2A2. Required prerequisites are not met so that install cannot run.

Description: This error message should occur only when the installer starts but cannot run enough to display the first panel.

Previous step: In UC2B.0, installer cannot start.

UC2A2.1: System presents error message such as "<Product Name> cannot be installed. <Failure Details>".

Next step: Exit.

UC2A3. Configuration is needed during installation.

Description: Configuration steps could be presented at various places in the install flow. Normally, they would be presented after the path has been chosen and before the summary or, if there is a separate config tool, it can be launched after install to appear more seamless. The specifics of this flow are very dependent on the application being installed, and the designs should reflect good usability principles for presenting and eliciting the required information.

Previous step: Typically UC2B.8, but possibly others as needed.

UC2A3.1: System presents message with configuration options.

Next step: UC2B.9, in most cases, but might be needed before the installation path is specified (for example, when node name is in path) or other appropriate location.

UC2A4. Install of an offering when initial configuration fails. User reviews failure information and is offered choice to review log file.

Previous step: UC2B.2.

UC2A4.1: System presents message with details of the failure in wording understandable by the user.

Next step: Exit.

UC2A22. Elementary check cannot be performed. Installation should stop at this point.

Previous step: Failure during UC2B.6, UC2B.9 or UC2B.11.

UC2A22.1: System presents message describing cause and stating that installation cannot proceed. If the cause of the failure is known, provide details about the cause.

Next step: Exit.

UC2A24. User cancels install prior to file copy.
UC2A25. User cancels install during file copy.

Description: Both of these flows are identical for users. The system should present the message when they cancel either before any of the files have been copied, or before all of the files have been copied (before or during UC2B.11). They should have the option to return to the installer or exit installation.

Previous step: User cancels installation at any time before file copy is complete (during UC2B.11).

UC2A24.1/UC2A25.1: System presents message confirming cancel.

Next step: Exit and initiate uninstall.

UC2A26. User cancels install after file copy, but before config is complete.

Description: This flow would most likely apply to an aggregated offering where fully usable versions of one or more offerings have already been installed.

Previous step: User clicks Cancel button any time after file copy is complete, but before configuration complete (during or after UC2B.11).

UC2A26.1: System presents message confirming that user wants to cancel installation.

UC2A26.1: System presents message giving users option of either fully uninstalling all of the offerings or keeping any usable offerings installed during the installation.

Next step: Exit and initiate uninstall.

UC2A31. Processes must be stopped or started in order for install to be completed.

Description: Installation requires processes to be stopped or started. Users in this case should have two choices:

1. Have system wait while users manually stop processes, and then check again.
2. Have system terminate these processes (do a hard stop).

Previous step: UC2B.9.

UC2A31.1: System lists detected running processes that will prevent successful install, and offers to stop these processes automatically or allow the user to stop them.

Next step: UC2B.10.

UC2A32. User wants to restart or stop running processes that were started or stopped after install was completed.

Description: Processes that have been stopped for install (see UC2A31) can be restarted at the end of install. Since the system stopped the processes, this step helps the user get the system back to the condition it was in before install.

Previous step: Replaces post-install summary (UC2B.12) when processes have been stopped.

UC2A32.1: System presents message giving user the option of restarting the processes.

Next step: Exit.

UC2A33. Install of additional features to an offering.

Previous step: User runs the installer after installing one or more copies of the offering. This might occur when the user inserts install media, runs uninstall from the current install path or selects copy in Add/Remove Programs (Microsoft Windows Add/remove programs).

UC2A33.1: System presents welcome message for offering modify.

UC2A33.2: System presents post-install options. User chooses to modify.

UC2A33.3: System presents features. User chooses features.

UC2A33.4: System presents languages. User chooses languages.

Next step: Continue to installer main flows at UC2B.9.

UC2A44. Dependency satisfied by multiple options. User must choose one.

Description: Multiple installed offerings can satisfy a prerequisite. For example, a user may have two different databases required.

Previous step: This should occur after UC2B.6 and before UC2B.10.

UC2A44.1: System presents message allowing users to choose one of the dependencies.

Next step: Continue to UC2B.7 and apply user selection.

UC2A46. Reboot message required after install.

Description: Users should not be forced to reboot if at all possible. If they do need to reboot, the reboot should replace the last step in installation or occur after the post-install summary. If they are going to be asked to reboot, any post-install options (for example, UC2A35) should not be included on the post-install summary.

Previous step: Install requires a reboot. Users should not be asked to reboot until UC2B.12.

UC2A46.1: System presents message that reboot is required and offers options of rebooting now or at a later time. User chooses reboot now.

Next step: Exit and reboot computer.

UC2A51. Processes automated stop fails.

Previous step: Installation requires processes to be stopped or started (UC2A31). User allows installation program to stop process, and hard stop fails.

UC2A51.1: System presents message that processes could not be stopped or started automatically. System can offer choice to try again or allow user to do it manually.

Next step: UC2B.10.

UC2A60. User without root permissions installs the offering.

Description: Users should be presented with a message as early as possible in the flow listing the limitations (for example, if DB2 Admin Server is installed as a non-root user, it might be possible to administrate only a local DB, not a remote DB). Additionally, some of the defaults might need to change in the flow (for example, path would use the user's path in DB2), and a check might need to be done to make sure the selected path can be written to. Note that this is a case where install can proceed, with limitations, as opposed to UC2A1, where users cannot proceed with install.

UC2A64. Install path exceeds operating system limit for path characters.

Previous step: In UC2B.8 or other step where users type in a path to create, user types name that exceeds operating system limitation (number varies by operating system).

UC2A64.1: System presents message that path (repeat the path back to user) is not valid.

Next step: Return to UC2B.8 or previous step.

UC2A66. User specifies an install path that is invalid.

Previous step: In UC2B.8 or other step where users type in a path to create, user types path that contains invalid characters..

UC2A64.1: System presents message that path (repeat the path back to user) is not valid.

Next step: Return to UC2B.8 or previous step.

UC2A67. User specifies a path or network address, and search for address times out because host cannot be reached.

Description: In a path field, user enters a remote path, but connection times out.

Previous step: Any panel where a user enters a path.

UC2A67.1: System presents error message stating that path could not be reached.

Next Step: Return to calling panel.

UC2A68. User specifies a path, but path cannot be found. This might be either a local or a remote path.

Description: User enters a path that does not exist when it does not make sense to create one: for example, if pointing to the location of a file to read. If the user is creating a file (for example, a response file), that path should be automatically created.

Previous step: Any panel where a user enters a path.

UC2A68.1: System presents error message stating that path or address could not be found.

Next Step: Return to calling panel.

3.1.1.2 UC3: Uninstall offering

Brief Description

User uninstalls a specific offering using an interactive uninstall.

Actors

1. User.

UC3 Basic Flow

Unless otherwise noted, a user action initiates an advance to the next step in the flow (for example, by clicking Next, pressing Enter, and so on.).

Preconditions

1. Product installer logs on to system using an ID that has authority to perform update.
2. Product and uninstall program have been previously installed.
3. There are no dependency issues or errors

UC3B.0: User launches uninstall program.

UC3B.1: System presents a list of languages available during uninstall. It should default to the locale, if applicable.

UC3B.2: System presents progress while preliminary checks and initialization are performed. This step may involve multiple progress bars. System automatically proceeds to next step.

UC3B.3: System presents welcome message for offering uninstall.

UC3B.4: System presents choices such as remove or modify. User chooses to remove offering.

UC3B.5: System presents options to uninstall only, create response file only or uninstall and create a response file. User takes default action of uninstall only without creating a response file.

UC3B.6: System presents confirmation that states what will be uninstalled. User initiates uninstall.

UC3B.7: System presents progress while uninstall proceeds. System automatically proceeds to next step.

UC3B.8: System presents message that uninstall was successful.

UC3 Alternative Flows

UC3A1. User does not have authority to uninstall.

Previous step: UC3B.5.

UC3A1.1: System presents error message to user saying that user does not have authority to run install, but can create a response file, which can be silently installed by a user with authority.

UC3A1.2: System presents option to create a response file. User can choose response file and perform a silent install when logged in with proper authority.

Next step: UC3B.5.

UC3A2. Relationship information determines uninstall will corrupt system, or cause other programs to not function.

Previous step: After user chooses to uninstall (UC3B.4), it is determined that part of the offering to be uninstalled is shared by other offerings.

UC3A2.1: System presents message to user that gives user the name and path information about the affected offering and the choice of continuing or quitting.

Next step: Continue uninstall at UC3B.5 and deal with conflict as user specifies.

UC3A5. Offering uninstall has updates applied.
UC3A6. Offering uninstall has fixes applied.
UC3A7. Offering uninstall has both updates and fixes applied.

Description: The flows for UC3A5, UC3A6 and UC3A7 should be identical to the main flow, unless there are issues such as dependencies (UC3A2) or feature uninstall (UC3A9). Fixes and updates should be removed before uninstall of offering proceeds, if needed.

UC3A9. User selects to uninstall features of an offering.
UC3A10. User selects languages to uninstall.

Description: If these options are available, they should be an option in step UC3B.4.

UC3A11. Processes must be stopped or started in order for uninstall to be completed.

Description: Installation requires processes to be stopped or started. User in this case should have two choices:

3. Have system wait while user manually stops services, then check again.

4. Have system terminate these processes (do a hard stop).

Previous step: Before UC3B.6, requires processes to be stopped or started.

UC3A11.1: System lists detected running processes that will prevent successful install, and offers to stop these processes automatically or allow the user to stop them.

Next step: Continue uninstall at UC3B.6 and deal with processes as user specifies.

UC3A12. User wants to restart or stop running processes that were started or stopped after uninstall has been completed.

Description: Processes that have been stopped for install (see UC3A11) can be restarted at end of install. Since the system stopped the processes, this step helps user get system back to condition it was in before install.

Previous step: Replaces Finish Step (UC3B.8) when processes have been stopped.

UC3A12.1: System provides option to restart running processes that were stopped.

Next step: Finish and exit install.

UC3A14. Uninstall fails. System presents failure info and user is offered choice to review log file.

Previous step: Failure during uninstall is detected (UC3B.7).

UC3A14.1: System presents message to user with failure details (replaces UC3B.8).

Next step: Exit.

UC3A18. Reboot message required after uninstall.

Description: Users should not be forced to reboot if at all possible. If they do need to reboot, the reboot should replace the last step in installation or occur after the post-install summary.

Previous step: Install requires a reboot. Users should not be asked to reboot until or after UC3B.8.

UC3A18.1: System presents message that reboot is required and offers options of rebooting now or at a later time.

Next step: Exit and reboot if selected.

3.1.2 Maintenance Use Cases
3.1.2.1 UC11: Install maintenance

Brief Description
User applies maintenance (installs maintenance package) to an existing offering using an interactive install.

This use case covers the interactive installation of a previously downloaded maintenance package where the user needs to specify what maintenance to install. A maintenance package can be an update (fix pack, refresh pack, for example) or fix (such as interim fix or test fix). If the maintenance process is changed so that selection and download of maintenance package is fully automated maintenance, an automated install maintenance use case would likely be different. It is necessary to support both manual and automated maintenance package installs.

Actors
1. User.

UC11 Basic Flow
Unless otherwise noted, a user action initiates an advance to the next step in the flow (for example, by clicking Next, pressing Enter, and so on.).

Preconditions
1. User logs on to system using an ID that has authority to perform update.
2. Maintenance installer is installed, or otherwise available for use.
3. User has direct access to maintenance package on the hard drive, CD or other media, or network distribution.
4. Basic flow assumes only one fix pack maintenance package can be installed at a time. Alternate flows cover the install of one or more fixes at the same time.
5. Maintenance package can be installed to only one offering or offering copy (instance) at a time.
6. Maintenance package is readable by maintenance installer.
7. There are no dependency issues or errors

UC11B.0: User initiates maintenance install. System automatically proceeds to next step.

UC11B.1 (UC19B.1): System presents a list of languages that can be used by the install program. (If applicable, the product language files to install will be chosen later.) Language selection should default to the user or system locale, if applicable. User chooses language for the install.

UC11B. 2 (UC19B.2): System presents progress while preliminary checks and initializations are performed. This step may involve checks and progress may need to be presented in several substeps. System automatically proceeds to next step.

UC11B.3 (UC19B.3): System presents welcome message for maintenance activity.

UC11B.4: System presents options to install or roll back maintenance packages. User chooses install maintenance package.

UC11B.5: System presents list of offerings that are installed. User selects the offering to which maintenance package will be applied. Note that each copy of a coexisting offering should be treated as a different offering with a separate entry in this panel. If maintenance installer is specific to an offering, this skip may be skipped.

UC11B.6: System prompts for directory where maintenance packages for offering are located. If possible, defaults should be included if there are reasonable ones such as the last directory selected or those recommended for download in readme documents or on the product webpage.

UC11B.7: System presents message and progress while checking current system state and generating list of maintenance packages in the selected directory. System automatically proceeds to next step.

UC11B.8: System presents list of maintenance packages. (If maintenance list cannot be automated to provide latest maintenance packages that are appropriate for system, then maintenance packages should be separated into fixes and updates, since multiple fixes can be installed at once and only one update can be installed at once.) Information about each maintenance package is available, such as build release date and install status. The most recent update maintenance package should appear at the top of the list and be selected by default to encourage users to install latest level. User chooses the appropriate update maintenance package to be installed.

UC11B.9: System presents options to install only, create a response file only, or install and create a response file. User takes default action of install only, without creating response file.

UC11B.10: System presents status while dependency checks are performed.

UC11B.11: System presents summary listing maintenance packages to be installed and the offering they will be applied to (offering is designated by offering name and discriminant, such as install directory, since more than one copy of the offering might be installed).

UC11B.12: System presents status while the maintenance package is installed. System automatically proceeds to next step.

UC11B.13: System presents message stating the installation has been completed successfully and presents choice to finish or perform another maintenance activity. User chooses to finish.

UC11 Alternative Flows

UC11A1. User does not have authority to install. System presents message that informs user of authority limitation.

Previous step: UC11B.10.

UC11A1.1: System presents error message to user stating that user does not have authority to run uninstall but can create a response file, which can be silently run by a user with authority.

UC11A1.2: System presents option to create a response file. User can choose response file and perform a silent install when logged in with proper authority.

Next step: UC11B.10.

UC11A4. Dependency missing for maintenance package install and dependency cannot be installed.

Description: In this case, a dependency for a fix is not met, and cannot be met by the maintenance installer automatically (for example, by installing another fix. In this case, UC11A6 should apply).

Previous step: UC11B.10.

UC11A4.1: System either presents message listing missing dependencies or automatically selects them.

Next step: UC11B.10.

UC11A7. System detects that running processes must be stopped (or started) in order for install to be completed.

Description: Installation requires processes to be stopped or started. Users should get a warning before any processes are stopped, giving them the opportunity to manually stop them before proceeding.

Previous step: UC11B.10.

UC11A7.1: System lists detected running processes that need to be stopped or started, and gives users the opportunity to manually stop them before proceeding.

Next step: UC11B.10.

UC11A8. Running processes that were stopped need to be restarted after install is completed.

Description: Processes that have been stopped for install (see UC11A7) can be restarted at end of install. Since the system stopped the services, this step helps user get system back to condition it was in before install.

Previous step: UC11B.13.

UC11A8.1: System provides option to restart running processes that were stopped.

Next step: Finish and exit install.

UC11A17. Install of update when earlier update is installed.

Description: This should be identical to the main flow. Updates, such as fix packs, should be installable on any previous level.

UC11A21. Install of maintenance package requires configuration change or additional action.

Description: This flow will be maintenance package dependent. In general, configuration change should be avoided in a maintenance package install stream.

Previous step: UC11B.10.

UC11A21.1: System informs user that configuration (or other) change will occur prior to starting the install. User can continue or cancel install at this point.

Next step: UC11B.11.

UC11A26. Reboot required after maintenance package install.

Description: Users should not be forced to reboot if at all possible. If they do need to reboot, the reboot should replace the last step in installation or occur after the post-install summary. If they are going to be asked to reboot, any post-install options should not be included on the post-install summary.

Previous step: UC11B.13.

UC11A26.1: System presents message that reboot is required and offers options of rebooting now or at a later time.

Next step: Exit and reboot if selected.

UC11A27. Maintenance package includes fixes that are not as new as fixes already installed.

Description: This situation can occur when an updated version of a fix is released.

Previous step: UC11B.10.

UC11A27.1: System presents message stating that the selected packages are older than the ones currently installed and giving the option to either uninstall current ones and replace them with older ones or skip installing the older ones.

Next step: UC11B.10.

UC11A32. Install maintenance package that updates offering and another offering, such as a dependency that will 'break' other offerings using the dependency.

Previous step: UC11B.10.

UC11A32.1: System presents warning about the offering that will be broken.

Next step: UC11B.10.

UC11A34. Install that requires update to underlying infrastructure, such as SDD Runtime.

Description: Updates to the underlying infrastructure should happen automatically, such as through the SI bootstrap. If this is not instantaneous, a progress bar should be shown. If the update to the infrastructure requires a maintenance package, then users should be told where to get the maintenance package.

UC11A37. Automatic start or stop of processes fails.

Description:. Installation requires processes to be stopped or started and user chooses to do so automatically (see UC11A7 and UC11A8), but it fails.

Previous step: UC11A7.1 or UC11A8.1.

UC11A37.1: System presents message that processes could not be stopped or started automatically.

Next step: System can offer choice to try again or allow user to do it manually.

UC11A47. Dependency needed, and can be installed.

Description: Dependency for a maintenance package is missing but is included in maintenance package and is installable. Since dependency can be installed, it is noted in UC11B.10. Otherwise, the flow is same as basic flow.

Previous step: UC11B.10.

UC11A48. Dependency needed but cannot be installed.

Description: This flow has been removed and is identical to UC11A4.

UC11A56. Install path for response file exceeds operating system limit for path characters.

Description: User types fully qualified path or file name (or both) that is too long for operating system. Calculation should be based on real operating system path, not variable.

Previous step: UC11B.9.

UC11A56.1: System presents message that the path (repeat the path back to user) is too long and denotes the maximum path length for the operating system and the entered path length.

Next step: UC11B.9.

UC11A67. User specifies a remote path, and search for path times out because host cannot be reached.

Description: In a path field, user enters a remote path but connection times out.

Previous step: User enters a path and path is not found most likely when specifying the response file (UC11B.9) or choosing the maintenance location (UC11B.6).

UC11A67.1: System presents error message stating that path could not be reached.

Next Step: Return to previous step.

UC11A68. User specifies a remote path and host is found, but path cannot be found.

Description: User enters a path that does not exist on a server that can be reached. If the user is creating a file (for example, a response file), that path should be created, so this flow should not apply.

Previous step: User enters a path and path is not found, when choosing the maintenance location (UC11B.6).

UC11A68.1: System presents error message stating that path/address could not be found.

Next Step: Return to previous step.

UC11A85. Maintenance package found during maintenance package query is uninstallable because the package has been corrupted.

Description: Users should be warned about this either by a warning message or by displaying the package in step UC11B.8, but disabling it and representing it as uninstallable.

3.1.2.2 UC19: Interactive roll back maintenance packages

Brief Description

Roll back of a maintenance package that has been applied to one offering.

Actor

1. User

UC19 Basic Flow

Unless otherwise noted, a user action initiates an advance to the next step in the flow (for example, by clicking Next, pressing Enter, and so on.).

Preconditions

1. User logs on to system using an ID that has authority to perform roll back.

2. Maintenance installer is installed, or otherwise available for use.
3. Basic flow assumes that only one update maintenance package can be rolled back at one time. Fix maintenance packages might require roll back of multiple fixes at one time, such as corequisite fixes.
4. Installed maintenance package for offering can be determined by maintenance installer.

UC19B.0: User initiates maintenance roll back. System automatically proceeds to next step.

UC19B.1 (UC11B.1.): System presents a list of languages available for use during the install program. (The product language files will be chosen later.) Language selection should default to the user locale, if applicable. User chooses language for the install.

UC19B.2 (UC11B.2.): System presents progress while preliminary checks and initialization are performed. This step may involve checks and progress may need to be presented in several substeps. System automatically proceeds to next step.

UC19B.3 (UC11B.3.): System presents welcome message for maintenance package activity.

UC19B.4: System presents options to install or roll back maintenance package. User chooses roll back maintenance package.

UC19B.5: System presents list of offerings that have maintenance packages installed. User selects an offering.

UC19B.6: System presents message and progress bar while checking current system state and generating list of maintenance packages that can be rolled back. System automatically proceeds to next step.

UC19B.7: System presents list of maintenance packages that can be rolled back for chosen offering. (This list should appear similar to list of installable maintenance packages.) Information about each maintenance package is available, such as install date, build date and install status. User chooses the appropriate update maintenance package to roll back. UC19B.8: System presents options to roll back only, create a response file, or roll back and create a response file. User takes default action of roll back, without creating a response file.

UC19B.8: System presents options to roll back only, create a response file, or roll back and create a response file. User takes default action of roll back, without creating a response file.

UC19B.9: System presents status while dependency checks are performed.

UC19B.10: System presents summary list of maintenance packages to be rolled back and the offering that they will be rolled back from. Offering is designated by offering name and install directory since more than one copy of the offering might be installed.

UC19B.11: System presents status while the maintenance package is rolled back. System automatically proceeds to next step.

UC19B.12: System presents message stating the roll back was completed successfully and presents the choice to finish or perform another maintenance activity. User chooses to finish.

UC19 Alternative Flows

UC19A1. User does not have authority to roll back. System presents message that informs user of authority limitation.

Previous step: UC19B.9.

UC19A1.1: System presents error message to user stating that user does not have authority to run roll back, but can create a response file, which can be silently run by a user with authority.

UC19A1.2: System presents option to create a response file. User can choose response file and perform a silent roll back when logged in with proper authority.

Next step: UC19B.9.

UC19A3. Maintenance installer not capable of rolling back maintenance package due to dependency.

Description: If the maintenance install could install a maintenance package, it should be able to roll back the maintenance package. This flow can occur only if a back-level maintenance installer is somehow installed after the maintenance package has been installed.

Previous step: UC19B.9.

UC19A3.1: System presents error message to user stating that maintenance package cannot be rolled back.

Next step: UC19B.9.

UC19A4. User wants to roll back multiple fixes.

Description: This step is the same as UC19B.7, except user can choose more than one fix to roll back whereas UC19B.7 covers roll back of single fix pack maintenance package.

UC19A5. Corequisite fix is not selected for roll back.

Description: This flow should be handled like UC11A6. The corequisite fix should also be selected for roll back.

Previous step: UC19B.9.

UC19A5.1: Automatically select prerequisite or corequisite fixes if possible. If multiple locations or automatic scanning for fixes is available, any dependencies should be rolled back if possible. If dependency cannot be met, then system presents message stating the roll back cannot be completed and which dependency is required to also be rolled back.

Next step: UC19B.9.

UC19A6. Processes must be started or stopped in order for roll back to complete.

Description: Installation requires processes to be stopped or started. Users should get a warning before any processes are stopped, giving them the opportunity to manually stop them before proceeding.

Previous step: UC19B.9.

UC19A6.1: System lists detected processes that need to be stopped or started, and gives users the opportunity to manually stop them before proceeding.

Next step: UC19B.9.

UC19A7. User wants to restart or stop running services that were started or stopped after roll back is complete.

Description: Processes that have been stopped for install (see UC19A6) can be restarted at end of install. Since the system stopped the services, this step helps user get system back to condition it was in before install.

Previous step: UC19B.12

UC11A8.1: System provides option to restart running processes that were stopped.

Next step: Finish and exit install.

UC19A9. Roll back of shared software, and may 'break' other offerings.

Previous step: UC19B.9.

UC11A12.1: System presents message that fix pack is not tested with the following products that depend on this product, and prompts user to continue or cancel. User continues.

Next step: UC19B.9.

UC19A13. Roll back of fix pack when fixes are installed post fix-pack install.

Description: The fix pack and any fixes that were installed after the fix pack should be rolled back. This flow is the same as the main flow; each maintenance package to be rolled back should be listed in summary.

UC19A14. Roll back of fix pack when earlier fix pack is installed.

Description: If an earlier fix pack is installed, the roll back should roll back to that level. This flow is the same as the main flow.

UC19A15. Roll back of fixes when fix pack is installed.

Description: Only fixes newer than and installed after the fix pack can be rolled back. Fixes that have been superseded cannot be rolled back until the superseding fix is removed. This flow is the same as the main flow.

UC19A17. Roll back of maintenance package requires configuration roll back or additional action.

Description: This flow will be maintenance package dependent. In general, configuration changes should be avoided in maintenance streams. Any configuration steps would need to occur prior to roll back, since maintenance package code could be needed to do configuration roll back.

UC19A20. Reboot required after maintenance package roll back.

Description: Users should not be forced to reboot if at all possible. If they do need to reboot, the reboot should replace the last step in installation or occur after the post-install summary. If they are going to be asked to reboot, any post-install options should not be included on the post-install summary.

Previous step: UC19B.6.

UC19A20.1: System presents message that reboot is required and offers options of rebooting now or at a later time.

Next step: Exit and reboot if selected.

UC19A22. Maintenance package roll back fails.

Description: Maintenance package roll back can fail for a variety of reasons. As many checks as possible should be done prior to starting the roll back, to help ensure it will be successful. When it fails, users should be informed of the failure and actions to take. Both summary and detailed information about the failure should be provided. If using GUI, users could also be presented an option to view the log file containing the information about the failure. If the user can try roll back again without exiting, then that option should be provided.

Previous step: UC19B.11.

UC19A22.1: System presents message that describes the failure and user actions that can be performed to address it.

Next step: Exit.

UC19A25. Installer has performed a custom action that cannot be undone.

Description: Actions that are performed as part of a maintenance package install should be able to be undone. If they are not, users should be clearly informed how to get their system back to the state it was in prior to the maintenance package install.

Previous step: UC19B.9.

UC19A3.1: System presents error message to user stating that action cannot be undone.

Next step: UC19B.9.