ABout Time Linux - Configuration Manager (v0.4)

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1 Use Cases

1.1 Use Case 1

Use Case Name:	**Install Configuration**
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	A package containing a new configuration file will be installed.
Actors:	AbT
Preconditions:	configManager has access to the package configuration file. configManager has generated a list of all configuration files
Triggers:	AbT submits a request for installing a configfile from a package.
Basic Course of Events:	1. AbT submits a request for installing a configfile from a package 2. Open list of all configuration files 3. Search the list for the path of the last version of the configfile 4. Send request to AbT to backup the old configfile at the path given at step 3 5. Send request to AbT to store the new configfile at the path given at step 3
Alternative Path:	At Step 3: If no last version is found of the configfile a. Continue with step 5
Exceptions:	If configuration file could not be accesed in a package a. Return ERROR List of Configuration could not be openend b. Return ERROR
Assumptions:	1. AbT logs every action. 2. The package to install contains a configfile
Postconditions:	1. Installed configuration file from the package 2. The old configuration file is backuped
Related business rules:	-

1.2 Use Case 2

Use Case Name:	**Upgrade configuration**
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	The current configuration file is being upgraded by a new one
Actors:	AbT
Preconditions:	a. configManager has access to the package new configuration file. b. configManager has generatad a list of all configuration files
Triggers:	AbT submits a requests to upgrade the current configuration file with a new one from the package.
Basic Course of Events:	1. AbT submits a requests to upgrade the current configuration file with a new one from the package. 2. Open list of all configfiles. 3. Search in the list for the path of the last version of the configfile. 4. Open the current configuration file from the path given at step 3 5. Compare the configuration variables from the current file given at step 4 with the variables from the new configuration file 6. Backup the current configuration 7. Return to AbT the linenumbers of the variables which needed to be added from the new configuration file to the current. 8. Return to AbT the linenumbers of the variables, which no longer exist in the new configuration file, to delete them.
Alternative Path:	At Step 5: The configuration files are equal a. Skip steps 6,7,8
Exceptions:	Current configuration file could not be found a. Return ERROR List of Configuration could not be openend b. Return ERROR
Assumptions:	1. AbT logs every action. 2. The package for the upgrade process contains a configfile
Postconditions:	1. Current configuration file is upgraded with the variables from the upgrade package. 2. The old configuration file is backuped
Related business rules:	-

1.3 Use Case 3

Use Case Name:	**Backup configuration**
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	A configuration file is stored to a backup location
Actors:	AbT
Preconditions:	Configuration file to backup exists configManager has generated a list of all configuration files
Triggers:	AbT submits a request for backup a configfile with given identifiers.
Basic Course of Events:	1. AbT submits a request for backup a configfile with given identifiers. 2. Open list of all configuration files 3. Search the path of the configuration file with given identifiers 4. Send request to AbT to store the configuration file, from the path given at step 3, to the backup location
Alternative Path:	None
Exceptions:	Path of Configuration File is not found a. Return ERROR List of Configuration could not be openend b. Return ERROR
Assumptions:	1. AbT logs every action. 2. AbT gives valid identifiers for the configuration file.
Postconditions:	1. Backup made of Configuration file
Related business rules:	-

1.4 Use Case 4

Use Case Name:	Restore configuration
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	A Configuration file is restored from a backup location.
Actors:	AbT
Preconditions:	Configuration file to restore exists and is specified by identifiers
Triggers:	AbT submits a request for restore a configuration file with given identifiers
Basic Course of Events:	1. AbT submits a request for restore a configuration file with given identifiers 2. Open list of all configuration files 3. Search the list for path of the configuration file with the given identifiers 4. Check the list if a current configuration file already exists. 5. Send request to AbT to move the configuration file from the backup location to the new location.
Alternative Path:	At Step 4: Configuration File already exists a. Send request to AbT to backup and remove the existing configuration file and continue with the next steps.
Exceptions:	The backuped configuration file is not found a. Return ERROR List of Configuration could not be openend b. Return ERROR
Assumptions:	1. AbT logs every action. 2. The request from AbT contains valid identifiers.
Postconditions:	1. Configuration file restored
Related business rules:	-

1.5 Use Case 5

Use Case Name:	**Remove configuration**
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	A Configuration file with given identifiers will be removed
Actors:	AbT
Preconditions:	configManager has generated a list of all configuration files
Triggers:	AbT submits a request for deleting a configuration file with the given identifiers
Basic Course of Events:	1. AbT submits a request for deleting a configuration file with the given identifiers 2. Open list of all configuration files 3. Search the list for the path of the configuration files containing the given identifiers. 4. Send request to AbT to delete the configuration file from the following path
Alternative Path:	None
Exceptions:	Configuration File is not found a. Return ERROR. List of Configuration could not be openend b. Return ERROR
Assumptions:	1. AbT logs every action. 2. The request from AbT contains valid identifiers.
Postconditions:	1. Configuration file is removed
Related business rules:	-

1.6 Use Case 6

Use Case Name:	**Edit configuration**
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	Values of a configuration file are edited
Actors:	AbT
Preconditions:	Configuration file to be edited is specified Variables to be edited are specified configManager has generated a list of all configuration files
Triggers:	AbT submits a request for editing a value within a specified configuration file
Basic Course of Events:	1. AbT submits a request for editing a value within a specified configuration file 2. Open list of all configuration files 3. Search the path of the configuration file with given identifiers 4. Open the configuration file from the path given at step 3 5. Search for the variables keys 6. Return request to AbT with the linenumbers from step 5 to edit the variables 7. Return request to Abt to store the configuration file
Alternative Path:	None
Exceptions:	Configuration File not found a. Return ERROR Key of a variable in configuration file is not found. b. Return ERROR List of Configuration could not be openend c. Return ERROR
Assumptions:	1. Keys and values are valid specified. 2. AbT logs every action. 3. AbT has access to filesystem to read and write the configuration file
Postconditions:	1. Configuration file edited
Related business rules:	-

1.7 Use Case 7

Use Case Name:	**Generate List of Configurations**
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	A list of all configuration files at the system is generated
Actors:	AbT
Preconditions:	configManager has access to read the entire file system
Triggers:	AbT submits a request to generate a list of all configuration files.
Basic Course of Events:	1. AbT submits a request to generate a list of all configuration files. 2. Search the entire file system for configuration files 3. Collect name, version and path information of every configuration file 4. Group the information to a list 5. Return the list to AbT
Alternative Path:	None
Exceptions:	Configuration Files not found a. Return ERROR Configuration Files can not be openend b. Return ERROR
Assumptions:	1. AbT logs every action. 2. The type configuration files can be found by a identifier 3. Name, version and path information can be accessed by configManager
Postconditions:	1. A list with all configurations is returned.
Related business rules:	-

1.8 Use Case 8

Use Case Name:	**Find Configuration**
Authors:	RuDev
Dates:	04-12-2006
Iteration:	Focussed
Description:	Search the entire system for a configuration file identified by identifiers given by AbT
Actors:	AbT
Preconditions:	Configuration file to be generated specified
Triggers:	AbT submits a request for searching a configfile containing the given identifiers
Basic Course of Events:	1. AbT submits a request for searching a configfile containing the given identifiers. 2. Open list of all configfiles 3. Search in the list for the configfile with the given identifiers. 4. Return AbT the path of the configfile
Alternative Path:	At Step 4: If configfile is not found a. Return message 'Configuration file not found" to AbT
Exceptions:	List of Configuration could not be openend a. Return ERROR
Assumptions:	1. AbT logs every action. 2. The request from AbT contains valid identifiers.
Postconditions:	1. The path of the configuration file matching the identifiers is returned.
Related business rules:	-