VISHNU - FMS - Tests report

COLLABORATORS			
	TITLE : VISHNU - FMS - Tests report		
ACTION	*NAME*	*DATE*	*SIGNATURE*
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Contents

Chapter 1

Introduction

Author of the test code : TODO

Author of the test report : TODO

The tests which follows have been done in the following environment:

- Database used : PostgreSQL 8.4

- OS used for the test : Ubuntu 10.10

- Cmake version : V2.6

- gcc version : V4.3.3

- DIET version : V2.6.1

- Batch scheduler : TORQUE V2.5

- RAM memory : 2Gb

Chapter 2

Functional tests

2.1   F1.CR1-B:Create New files

API command: createFile

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.CR1-B	Normal execution of createFile	A file is created	A file is created	0
F1.CR1-E1	The file path is invalid	VishnuException	VishnuException	0
F1.CR1-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.CR1-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.2   F1.DE1-B: Delete files

API command: removeFile

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.DE1-B	Normal execution of removeFile	A file is removed	A file is removed	0
F1.DE1-E1	The file path is invalid	VishnuException	VishnuException	0
F1.DE1-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.DE1-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.3   F1.CR2-B:Create New directories

API command: createDir

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.CR2-B	Normal execution of createDir	A directory is created	A directory is created	0
F1.CR2-E1	The file path is invalid	VishnuException	VishnuException	0
F1.CR2-E2	Not access rights to the directory	VishnuException	VishnuException	0
F1.CR2-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.4   F1.DE2-B: Delete directories

API command: removeDir

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.DE2-B	Normal execution of removeDir	A file is removed	A file is removed	0
F1.DE2-E1	The file path is invalid	VishnuException	VishnuException	0
F1.DE2-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.DE2-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.5   F1.DI1-B: Display head of files

API command: headOfFile

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.DI1-B	Normal execution of headOfFile	The head of file is returned	The head of file is returned	0
F1.DI1-E1	The file path is invalid	VishnuException	VishnuException	0
F1.DI1-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.DI1-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.6   F1.DI2-B: Display tail of files

API command: tailOfFile

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.DI2-B	Normal execution of tailOfFile	The tail of file is returned	The tail of file is returned	0
F1.DI2-E1	The file path is invalid	VishnuException	VishnuException	0
F1.DI2-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.DI2-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.7   F1.DI3-B: Display content of files

API command: contentOfFile

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.DI3-B	Normal execution of contentOfFile	The tail of file is returned removed	The tail of file is returned removed	0
F1.DI3-E1	The file path is invalid	VishnuException	VishnuException	0
F1.DI3-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.DI3-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.8   F1.DI4-B: Display content of directories

API command: listDir

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.DI4-B	Normal execution of listDir	The directory content is returned	The directory content is returned	0
F1.DI4-E1	The file path is invalid	VishnuException	VishnuException	0
F1.DI4-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.DI4-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.9 F1.DI5-B: Get information about remote files

API command: getFilesInfo

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.DI5-B	Normal execution of getFilesInfo	Information about a remote file is returned	Information about a remote file is returned	0
F1.DI5-E1	The file path is invalid	VishnuException	VishnuException	0
F1.DI5-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.DI5-E3	Bad machine Identifier	VishnuException	VishnuException	0

2.10 F1.CH1-B: Change access rights of files

API command: chMod

ID test	Description of the test cases	Output expected	Output gotten	Error
F1.CH1-B	Normal execution of chMod	The access rights of files is changed	The access rights of files is changed	0
F1.CH1-E1	The file path is invalid	VishnuException	VishnuException	0
F1.CH1-E2	Not access rights to the file	VishnuException	VishnuException	0
F1.CH1-E3	Bad machine Identifier	VishnuException	VishnuException	0

Chapter 3

Stress tests

ID test	Date	Test description	Command(s) tested	Results
STR-SERV-DOWN	06/06/11	The ims sed is stopped and restarted	setUpdateFrequency	Success - normal update frequency setting
STR-AGENT-DOWN	06/06/11	The SysFera-DS Agent is stopped and restarted		failure
STR-DB-DOWN	06/06/11	The VISHNU database is stopped and restarted	getUpdateFrequency	Not functional - Failure la deuxième fois qu'on relance la commande Success - the corresponding error message is returned

Chapter 4

Load tests

ID test	Date	Test description	Command(s) tested	Results
LOAD-2.1-getMetricCurrentValue	06/06/11	Simultaneous launch of 100 commands	getMetricCurrentValue	Success - normal execution of all commands launched
LOAD-2.1-getMetricHistory	06/06/11	Success - Simultaneous launch of 100 commands	getMetricHistory	Success - normal execution of all commands launched

Chapter 5

Performance tests

ID test	Test description	Command(s) tested	VISHNU execution time	SSH execution time	Results
CDP-3.1-getMetricCurrentValue	comparison with " ssh host ps -efl "	getMetricCurrentValue	0,156s	0,280s	Success
CDP-3.1-getMetricHistory	comparison with " ssh host ps -efl "	getMetricHistory	0,116s	0,280s	Success

ID test	Test description	Command(s) tested	Comsumption	Results
CDP-3.2.1-getMetricCurrentValue	memory consumption less than 500 Mb	getMetricCurrentValue	1,3% of the RAM	Success
CDP-3.2.1-getMetricHistory	memory consumption less than 500 Mb	getMetricHistory	1,6% of the RAM	Sucess
CDP-3.2.2-getMetricCurrentValue	CPU consumption less than 10%	getMetricCurrentValue	0,7% of the CPU	Sucess
CDP-3.2.2-getMetricHistory	CPU consumption less than 10%	getMetricHistory	0,7% of the CPU	Sucess
CDP-Memserver	Memory consumption of ims server running during 24 hours	ims server		