



CATE Storage and Backup Engineering
Citigroup Architecture & Technology Engineering

EMC XtremIO Certification

CSBE-14008-PS

Project Scope

Version 1.0

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1 Version Control

Version	Date	Author	Reviewed	Comments
0.1	5-Dec-2013	Jeff Hernandez		Initial document for RFC
1.0	4-Apr-2014	Jeff Hernandez		Final document

2 Legal Notice

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3 Contact

Please address any comments or questions regarding the information contained in this document via email to [*CATE Storage and Backup Engineering](#).

4 Latest Versions

It is recommended that the latest version of the document be used from the [CATE Storage and Backup Engineering website](#). Newer versions may include certification on additional platforms, or comments on issues discovered after deployment.

5 Regional Reviewers

The purpose of this section is to list all the stakeholders who reviewed this document during the Request for Comment process.

Region	Reviewed by	Version reviewed
Asia Pacific	No feedback	
EMEA	No feedback	
Japan	No feedback	
Latin America / Mexico	No feedback	
North America	No feedback	

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6 Project Scope

This project focuses on the certification of EMC's XtremIO storage platform to be used in Block / SAN environments.

The EMC XtremIO was designed as an all flash enterprise storage array for block-based storage using a common management interface. This is the first GA certification for this product at Citi.

The current target code version for this project is 2.2.3-25 (SP3). If issues are identified during testing then an alternate candidate release may be selected.

6.1 Project Strategy

The project will take the form of vendor supplied GA hardware and software installed in the Citi lab environment. Basic services will be validated post install as this is considered part of the vendor's realm of responsibility¹.

All features and functionality available in the GA hardware and software will be reviewed, the intention of the initial phase of the project will be to provide a baseline certification of the product for specific use cases at Citi. The second phase of the project will be to complete all Citi certification processes to meet standards and audit requirements.

6.2 Project Classification

This project is classified as a Create/Maintain and will be tracked in Planview under the product maintenance category.

6.3 Project Deliverables

The documentation to be delivered/updated as part of this project consists of:

- CSBE-14008-PS Project Scope (this document)
- CSBE-14008-RN EMC XtremIO Release Notes
- CSBE-14008-SG EMC XtremIO Solutions Guide

The software to be delivered as part of this project consists of:

- XtremIO XMS (XtremIO Storage Management Application)

¹ The vendor will be asked to provide test plans where appropriate, alternatively the vendor will be asked to provide personnel and potentially infrastructure resources to test basic functionality in the product.

6.4 Project Prerequisites

The prerequisites for this project are:

1. EMC to provide GA hardware and software in Citi lab
2. Availability of a physical host connected to XtremIO
3. Assign CATE Storage and Backup Engineering resource(s)

6.5 Project Risks

The following project risks exist at time of project inception:

1. Reallocation of engineering resources to other projects
2. Existing project commitments and deliverable deadlines
3. This is newly released hardware and Operating Environment from EMC and as such has spent limited time released in the field.

6.6 In scope for this project

Please refer to Section [6.7.1 Features requiring testing](#) for a list of items deemed in scope for this project. Each item will be assessed for their applicability and potential impact on the XtremIO for SAN standard build and operational best practices.

6.7 Out of scope

CATE Storage Engineering will be leveraging vendor testing to validate the fixes for any bugs addressed with this release of software.

Other components / features considered out of scope for the initial phase of certification include:

- None

6.7.1 Features requiring testing

The purpose of this section is to communicate the level of testing planned to be conducted by CATE on new feature functionality in the product, compared to where vendor testing is being leveraged.

Feature	Testing					Notes
	Light ²	Medium ³	Heavy ⁴	Vendor ⁵	Out of Scope ⁶	
NDU to XtremIO operating environment			✓			
Thin Provisioning			✓			Native Thin Provisioning
Inline Data Reduction			✓			Inline De-Duplication
Local Protection SnapShots					✓	Snapshots not supported
Remote Protection					✓	Replication not supported
Local Management			✓			Domain Management RBAC
Application Protection					✓	
Audit Logging and Review		✓				Central Event Monitoring, SEMS
Reporting		✓				Native tools
Local Monitoring		✓				SNMP Alerting Pool related alerting
Remote Monitoring and Access	✓					SMTP ESRS Gateway
Remote Monitoring (Management Station)					✓	ESRS IP Client For XtremIO
Performance Management	✓					
XMS Management and CLI			✓			XtremIO Mgmt, CLI
Host Connectivity FC Current Platforms					✓	SAN Stacks for Current Platforms
Host Connectivity FC Legacy Platforms					✓	SAN Stacks for Legacy Platforms
Host Connectivity iSCSI, FCoE			✓			10Gb Connectivity iSCSI or FCoE

² Less than 4 hours of testing – validate functionality / proof of concept testing

³ Between 4 and 8 hours of testing – validate functionality and devise best practices

⁴ More than 8 hours of testing – validate functionality, determine use cases, identify operational issues and devise best practices

⁵ Vendor to provide test plans executed in QA or to test on behalf of Citi

⁶ Functionality will not be tested or recommended for production use as a result of this project.

6.8 Project Objectives

Milestones	
Milestone 1	(31 January 2014)
✓ Obtain product documentation from vendor ✓ Obtain operating system release from vendor ✓ Achieve operations and stakeholder approval of initial project scope ➤ Benefit to operations: n/a ➤ Operations cleared for: n/a	
Milestone 2	(28 February 2014)
✓ Draft tactical Solutions Guide distributed as Request for Comment (RFC) ➤ Benefit to operations: Provides steps required to plan implementation ➤ Operations cleared for: Ordering new software, planning deployment / upgrade	
Milestone 3	(30 April 2014)
✓ Draft Release Notes distributed as Request for Comment (RFC) ✓ Perform initial CIVA scan ✓ Complete ISRP questionnaire ➤ Benefit to operations: Documented best practices ➤ Operations cleared for: Deployment of software in production environments	
Milestone 4	(30 May 2014)
✓ Finalized Release Notes and updated Solutions Guide distributed as Release to Production ✓ Complete CIVA and ISRP process ✓ Document Risk Exceptions ➤ Benefit to operations: Documented best practices ➤ Operations cleared for: Deployment of software in production environments	

7 Document Version Control

This section contains a detailed list of the updates made during each document release. Section 1 is purely an overview.

Version	Changes
0.1	Initial draft – general CATE peer review
1.0	Final – including tactical and strategic milestones