



## DELL EMC TESTING MATURITY MODEL – Why Testing Matters

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### SUMMARY

Extensive, rigorous testing means quality and customer value.

Dell EMC uses TMMi methodology to expand our test process capability and overall maturity to achieve a high level of product quality and delivery capability.

Dell EMC's testing process gains industry recognition.

### The role of testing in PowerEdge quality

Testing and Validation is part of every manufacturer's product release process. At Dell EMC however, the detail and diligence that goes into every product adds value and confidence that products and solutions meet the most stringent requirements, going beyond "break fix" to ensure reliability and lifecycle value to our customers. The testing processes not only fix bugs: It also demonstrates true capabilities that customers can expect to receive when the products are in their IT infrastructures, driving their real-world applications. Dell EMC testing also results in comparative metrics that demonstrate competitive differentiation. These metrics and competitive claims are legally approved, again to provide customers confidence that the test results reflect the true capabilities of the products and solutions.



### Testing Maturity Model Integration (TMMi)

The Dell EMC PGCO Enterprise Validation Team has focused on identifying a concept, approach and methodology to expand our test process capability and overall maturity to achieve a high level of product quality and delivery capability. The Testing Maturity Model Integration (TMMi) is a model of testing best practices that can help organizations determine whether their testing processes are complete and whether they are effective. It contains levels through which an organization passes as its testing process evolves from one that is ad hoc and unmanaged to one that is managed, defined, measured, and optimized. Achieving TMMi Certification insures that every product follows a set process to insure both functionality and the ability to perform tasks as expected.

## TMMi background and history

The TMMi framework has been developed by the TMMi Foundation as a guideline and reference framework for test process improvement, and is positioned as a complementary model to the Capability Maturity Model Integration Version 1.2 [CMMI] addressing those issues important to test managers, test engineers, and software quality professionals. The Testing Maturity Model Integration (TMMi) seeks to help organizations to improve the complete testing process through a holistic approach to quality assurance. The TMMi methodology approaches improving testing by providing a standard reference model so that strengths and best practices can be identified and weaknesses in testing effectiveness and efficiency can be improved.

## Dell EMC receives industry recognition

As described by Mark Keating, Senior Principle Engineer, PGC0 Validation Team. “The Dell EMC PGC0 Validation team has been actively engaged in enhancing our process capabilities and is pleased to achieve the fully certified TMMi level 3 Certification. Dell EMC is the first major technology company in North America to achieve this level.”

TMMi Maturity Levels and Process Areas	Testing	Critical Success Factors
<p><b>Level 2 - Managed</b></p> <ul style="list-style-type: none"> <li>- <b>Test Policy and Strategy</b></li> <li>- <b>Test Planning</b></li> <li>- <b>Test Monitoring and Control</b></li> <li>- <b>Test Design and execution</b></li> <li>- <b>Test Environment</b></li> </ul> <p><b>Level 3 – Defined</b></p> <ul style="list-style-type: none"> <li>- <b>Test Organization</b></li> <li>- <b>Test Training Programs</b></li> <li>- <b>Test Lifecycle and integration</b></li> <li>- <b>Non Functional Testing</b></li> <li>- <b>Peer Review fina</b></li> </ul>	<p>The process consisting of all lifecycle activities, both static and dynamic, concerned with planning, preparation and evaluation of software and hardware products to determine that they satisfy specified requirements, to demonstrate that they are fit for purpose and to detect defects.</p> <p><i><b>[International Software Testing Qualifications Board]</b></i></p>	<p><b>Sponsor</b></p> <ul style="list-style-type: none"> <li>- Continued commitment and focus from Project sponsor and Executive management</li> <li>- Attention and support of all stakeholders (including Business, Development, Testing)</li> </ul> <p><b>Participation</b></p> <ul style="list-style-type: none"> <li>- Active participation of practitioners throughout the engagement</li> </ul> <p><b>Feedback</b></p> <ul style="list-style-type: none"> <li>- On-Going support and feedback from all members of the organization</li> </ul> <p><b>Communication</b></p> <ul style="list-style-type: none"> <li>- Organizational Change Management</li> <li>- Appropriate planning and communication</li> </ul>

### For more information:

- [https://en.wikipedia.org/wiki/Capability\\_Maturity\\_Model\\_Integration](https://en.wikipedia.org/wiki/Capability_Maturity_Model_Integration)
- <http://www.tmmi.org/pdf/TMMi.Framework.pdf>