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Aspen Mtell

Study Guide for Certification

Aspen® Knowledge | Learn. Apply. Succeed.

An Aspen Mtell Certified User has a practical understanding and the hands-on skills required to build and deploy agents to predict equipment failure and abnormal behavior in production operation. Passing the exam demonstrates your skills in predicting a failure with more than 95% accuracy, minimizing the unplanned shutdown due to equipment failure, minimizing the time the equipment is being maintained, and minimizing the production hours lost due to maintenance. You become a valued trusted expert who can diagnose the problem and maximize the performance of your equipment.

Exam Scope for Mtell

- □ Configuration and Settings
- □ Equipment Information
- □ System Health
- □ Usability
- □ Failure Library
- □ Equipment Set Profile
- □ Machine Learning Agents
- □ Anomaly Agent
- □ Failure Agent
- □ Best Practices
- □ Mtell View
- □ Lab

Grading

Grade	Weight
Multiple choice questions	40%
Lab task	60%
Total	100%

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Who can take this certification?

The certification is a must-have for any user who are reliability and maintenance engineer who want to show their credibility in using Aspen Mtell. The exam contains both multiple choice questions and a lab. We will provide the latest version of AspenTech software. All our exams are conducted with a proctor, either in-person or through remote testing.

Step 1. Prepare with training

AspenTech offers a variety of delivery methods in which you can take training. Complete Course: Predict and Prevent Asset Failure using Aspen Mtell (APR101) – 3 Days.

- Register for public training (face to face or virtual)
- Register for private training (face to face or virtual)
- Subscribe to eLearning (on-demand)

Step 2. Practice before exam

This guide contains 100% coverage of all objectives for the Mtell certification exam. You can use it as both a study tool and an on-the job reference.

Step 3. Get Certified

You will have up to 4 hours to complete the exam.

You may take the exam after completing training or view schedule to register on a different day or time. In-person and remote/virtual testing are available. Please make sure that you select the correct Location/Time Zone.

After passing the exam you will receive an email to post your certificate and digital badge on social media, which is a cross-industry recognition of technical skills you may share on LinkedIn, as well as in your email signature. View the instructions on how to post your credentials on LinkedIn profile.

SCOPE	TECHNICAL CONTENT	COMPETENCY OBJECTIVE
Configuration and Settings	Sensor Data Source	**Explain** the sensor data source configuration
	Agent Service	**Describe** Agent Service configuration
		Explain Agent Service use
	Training Service	**Describe** Training Service configuration
		Explain Training Service use
	Mtell Security	**Explain** Aspen Mtell security
		Explain Data Acquisition and Scheduling
Equipment Information	Asset Hierarchy	**Illustrate** Equipment hierarchy
		Summaries Agent Execution information
	Agents	**Explain** procedure to import and export agents
		Explain agent alert history
System Health	Log Monitoring	**Describe** System Health Monitoring
		Explain Log history monitoring
Usability	Database Connection	**Explain** database accessibility
	Mimosa Mapping	**Describe** Mimosa Mapping usability
Failure Library	Work Orders	**Explain** Failure Library purpose
		Describe procedure for work order import and export
Equipment Set Profile	Equipment Set	**Illustrate** Equipment set profile
	TDS	**Explain** Training Data Source
	Sensor Mapping	**Explain** Sensor Mapping
	Sensor Group	**Explain** Sensor Group

Equipment Set Profile	Sensor Group	**Explain** Sensor Roles
	Offline Conditions	**Explain** Offline Conditions
		Explain Sensor Audit Report
Machine Learning Agents	Agent Types	**Illustrate** different Agent types
	Probability View	**Describe** Probability Trend
	Trend View	**Describe** Trend View
		Describe View Trend Lines
	Metrics	**Explain** Agent Performance Metrics
		Explain Confusion Metrics
		Explain deploying Live Agents
		Explain Minimum Alarm Duration
		Explain Live Agent Group
Anomaly Agent	Anomaly Agent	**Explain** Anomaly Agent
		Illustrate tuning parameters for Anomaly Agent
		Describe Probability Threshold settings for Anomaly Agent
Failure Agent	Failure Agent	**Explain** Failure Agent
		Illustrate tuning parameters for Failure Agent
		Describe Probability Threshold settings for Failure Agent
		Explain Sample Learning Performance
		Describe Operating State purpose
Best Practices	Best Practices Anomaly and Failure Agent	**Explain** best practices for Anomaly Agent
		Explain best practices for Failure Agent
		Describe Holdout in Failure Agent
Mtell View	Mtell View	**Describe** Mtell View use
		Explain browsing live agents in Mtell View

Mtell View	Mtell View	**Describe** closing alerts in Mtell View
		Describe generating work order while closing alerts
Lab	System Manager	**Import** Asset Hierarchy
	Agent Builder	**Import** work order history
		Import Data Set for agent training
		Define Sensor Mapping
		Define Sensor Roles
		Define Offline Condition
		Define Sensor Groups
		Action based on Sensor Audit Report
		Create Hidden Failure Agents
		Create Anomaly Agents
		Create Failure Agents
		Deploy Anomaly Agent live
		Deploy Failure Agent live

About Aspen Technology

Aspen Technology (AspenTech) is a leading software supplier for optimizing asset performance. Our products thrive in complex, industrial environments where it is critical to optimize the asset design, operation and maintenance lifecycle. AspenTech uniquely combines decades of process modeling expertise with machine learning. Our purpose-built software platform automates knowledge work and builds sustainable competitive advantage by delivering high returns over the entire asset lifecycle. As a result, companies in capital-intensive industries can maximize uptime and push the limits of performance, running their assets safer, greener, longer and faster. Visit AspenTech.com to find out more.