

# Aspen Mtell Certification Exam Process

Process Guide



# Table of Contents

Prior to	o Exam	3
1.	Review Process and Technologies Used	3
2.	Test WebEx	3
3.	Test CloudShare	3
4.	Review Exam Expectations	3
Day of	Exam	4
1.	Join WebEx to Connect with Proctor	4
2.	Connect to CloudShare to take Exam	4
3.	Start InfoPlus.21 Database	5
4.	Start Quiz	6
5.	Launch Aspen System Manager and create a database to complete lab	6
6.	Information on Process Data used in Mtell	9
Freque	ntly Asked Questions:	9



### **Prior to Exam**

#### 1. Review Process and Technologies Used

**Process Overview:** Aspen Online User Certification uses a two-step process to ensure that you can take exam securely and with integrity. You will be monitored through CloudShare Virtual environment, where you will take the exam. Web Ex will be used by sharing your webcam with the proctor. You will be asked to put your phone away.

#### Technology Used:

- WebEx for remote sharing
- CloudShare for Quiz and Lab

#### 2. Test WebEx

Please ensure your WebEx link works and you can access video camera. It is required for you to use a webcam during the exam. For troubleshooting, review the <u>WebEx help guide</u>.

#### 3. Test CloudShare

- Please test your <u>connectivity speed</u>. If your bandwidth is low, this is an Internet Service Provider issue. You will need a strong internet connection to ensure a good experience. To minimize issues, you can use an ethernet cord instead of WiFi and minimize the number of devices using the internet at the time of exam.
- To use Cloud Share's technology, the required *minimum* bandwidth for one RDP session is 150 Kbps
- Please use Google Chrome as the recommended browser.
- Close all browsers/tabs during the exam.
- If CloudShare crashes during exam, report to instructor.

#### 4. Review Exam Expectations

- Leaving the room for any reason is unacceptable other than to go to the restroom. Please notify the instructor through a private chat message.
- If the proctor sees indications that you are not taking the exam seriously, you may be failed. View <u>Aspen Certification Policy</u> of when you can retake exam.
- Please ensure you do not use any mobile device during the exam. They will need to be silenced and put away.
- Please mute yourself as a courtesy to both the other students and the proctor. If you wish to ask questions, please use the chat feature on WebEx and address it only to the proctor.
- Please avoid any conversations during the exam.
- Help files within AspenTech software may be used for the exam within the CloudShare environment.



# Day of Exam

#### 1. Join WebEx to Connect with Proctor

a. Join WebEx session and start Webcam to show your presence. Phones should not be used during exam.



#### 2. Connect to CloudShare to take Exam

a. Log into CloudShare, you should have received email with link and passphrase.

Class Environments				
POWEED BY CONTRACT				
Access your class er	nvironment			
Enter the credentials supplied by your instructor to start working with your environment.				
Enter the credentials your environment.	s supplied by your instructor to start working with			
	supplied by your instructor to start working with * indicates required field			
your environment.				

b. Click on button and you will see the virtual desktop





c. On the VM list, look out and click Full Screen RPD

	tual Machines	
Pro-	Please click on 'Full Screen RDP' to begin> Description: Manufacturing Execution Systems V15.0 Operating Systems Windows State: Loading from magnhot. O 1996 Shan Details -	Auf Soreen RDP

#### 3. Start InfoPlus.21 Database

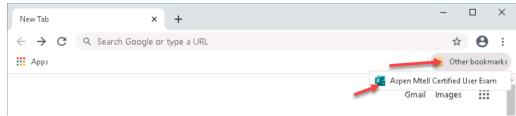
- a. The workshop is using simulated data generated by InfoPlus.21 Database, please start the database to start simulating the data before you get start the exam.
- b. Launch InfoPlus.21 Manager
- c. Click START InfoPlus.21

APM - Aspen InfoPlus.21 M	lanager V11 - aspenONE – 🗌 🗙
File Actions Help	
Defined Tasks move up move down WTSK_DBCLOCK TSK_H21_PRIME WTSK_SAVE WTSK_SAVE WTSK_SAVE	START InfoPlus 21 STQP InfoPlus 21 STQP InfoPlus 21 STARTUP @ BOOT NEW TASK DEFINITION
TSK, HBAK	Skip during startup     Restart settings       Task name (TSK_XXX)     Affinity       Priority     SubSystem       Executable
Refresh Live Task List TSK_ACCESS_SVC TSK_ADMIN_SERVEI TSK_APEX_SERVER TSK_DECLOCK TSK_DEFAULT_SERVEN	Input file Output file Error file
TSK_EXCEL_SERVE TSK_H21T TSK_IQ1 TSK_ORIG_SERVER V STOP TASK	Command line parameters           ADD         UPDATE         REMOVE         RUN
For Help, press F1	19:1

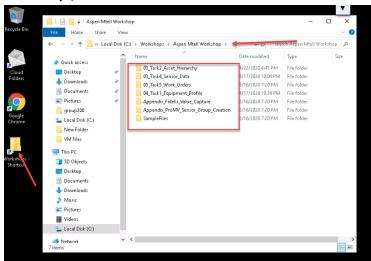


#### 4. Start Quiz

- a. Launch Chrome
- b. Click Other bookmarks and launch Aspen Mtell Certified User Exam



- c. Complete the multiple-choice questions
- d. Workshop files can be accessed from desktop shortcut or C:\Workshops\AspenMtell Workshop\ folder

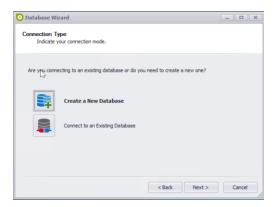


- 5. Launch Aspen System Manager and create a database to complete lab
  - a. Launch Aspen System Manager
  - b. Click next

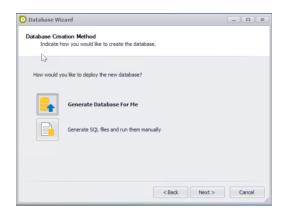


Welcome to the Database Configuration Wizard
It appears you are connecting to a database for the first time. The Database Configuration Vitatoria is used to insurge setting up remote and local databases which do not use the default connection settings.
To continue, click Next

c. Select Create a New Database and click Next



d. Select Generate Database For Me and Click Next



e. Don't make any changes, just click Next



🗿 Database Wizard					_		X
Create Database Enter the SQL Se	rver connection	settings.					
Select a SQL Server in to create databases. Server Host Name	APM	rate the database	: in and a user ac	count which has	permi	ssions	
SQL Server Instance			(leave blank	for default insta	nce)		
User Credentials O Integrated : SQL Authen User Name Password							
			< Back	Next >		Cancel	

f. It will run all the scripts to create the database, click Next

		ing Database s page tracks the progress of deploying the	e database.	
Die		wait while the database is being generated		
-	ase (	Operation	Result	
,	0	Creating database and building tables	Complete	
-	0	Inserting Standard Data	Complete	
	0	Applying Foreign Key Constraints	Complete	
	0	Creating Stored Procedures	Complete	

- g. Click Finish
- h. It will launch Initial Configuration Wizard, Click Cancel



i. You can now start with your workshop tasks.



#### 6. Information on Process Data used in Mtell

- a. Aspen InfoPlus.21 is simulating Process Data for most of the sensors used in the Lab. IP21 has data from Jan 1<sup>st</sup>, 2016.
- b. Vibration data are populated in CSV files located in C:\Workshops\AspenMtell
   Workshop\03\_Task4\_Sensor\_Data\ folder. Vibration data are from Jan 1<sup>st</sup>, 2016.
- c. We have completed CSV files for all imports. Remember to use exact names from CSV files when creating Sensor Data Sources. Names are case sensitive in Mtell.
- d. Data Wrangling will be required to define accurate sensor groups and sensor roles.

## Frequently Asked Questions:

1. How many Asset agents needs to be created in this exam?

Student should create agents only for 1 asset (Compressor1).

2. How many agents needs to be deployed live?

You only need to deploy 1 best Anomaly Agent and 1 best Failure Agent in this exam. However,

you may have to create and train many agents to find best agents in a sensor group.

3. Why TDS import is taking about 5 minutes for import?

Student should import only 1 asset Historian data into the TDS. If they import more than 1 asset

data, then it will take more time.

4. What time stamp format should I use when import CSV Historian data?

Students should use below Timestamp format which is supported by Windows Operating System.

Format		
specifier	Description	Examples
"d"	The day of the month, from 1 through 31.	M/d/yyyy H:m:s 5/2/2020 0:0:0
"dd"	The day of the month, from 01 through 31.	M/dd/yyyy H:m:s 5/02/2020 0:0:0
"M"	The month, from 1 through 12.	M/d/yyyy H:m:s 5/2/2020 0:0:0



aspentech

"MM"	The month, from 01 through 12.	MM/d/yyyy H:m:s 05/2/2020 0:0:0
"MMM"	The abbreviated name of the month.	MMM/d/yyyy H:m:s MAY/2/2020 0:0:0
"уу"	The year, from 00 to 99.	M/d/yy H:m:s 5/2/20 0:0:0
"уууу"	The year as a four-digit number.	M/d/yyyy H:m:s 5/2/2020 0:0:0
"h"	The hour, using a 12-hour clock from 1 to 12.	M/d/yyyy h:m:s AM 5/2/2020 1:0:0 AM
"hh"	The hour, using a 12-hour clock from 01 to 12.	M/d/yyyy hh:m:s AM 5/2/2020 01:0:0 AM
"H"	The hour, using a 24-hour clock from 0 to 23.	M/d/yyyy H:m:s 5/2/2020 1:0:0
"HH"	The hour, using a 24-hour clock from 00 to 23.	M/d/yyyy H:m:s 5/2/2020 01:0:0
"m"	The minute, from 0 through 59.	M/d/yyyy H:m:s 5/2/2020 0:1:0
"mm"	The minute, from 00 through 59.	M/d/yyyy H:mm:s 5/2/2020 0:01:0
"s"	The second, from 0 through 59.	M/d/yyyy H:m:s 5/2/2020 0:0:1
"ss"	The second, from 00 through 59.	M/d/yyyy H:m:ss 5/2/2020 0:0:01
"."	The time separator.	M/d/yyyy H:m:s 5/2/2020 0:0:0
"/"	The date separator.	M/d/yyyy H:m:s 5/2/2020 0:0:0

#### 5. I'm getting following error message when importing TDS, what should I do?

Tag Data Source not found for tag reference: AMBIENT\_PSI or any other Tag This error message will occur if Aspen Mtell Agent Builder is unable to find the Sensor Data Source. If you create Sensor Data Source while Agent builder was open, the changes were not recognized by Agent builder. Please close the Agent Builder and launch the Aspen Mtell Agent Builder again to resolve this issue.



6. The following error will appear when trying to open Agent Builder: (Default Exception Handler)

Application Exception: One or more errors occurred.



This issue will occur after Equipment set imported multiple times. Users can avoid this error by importing Equipment Set Profile using different Equipment set name rather than updating existing Equipment Set Profile. Please inform your proctor if you encounter this error message.

#### 7. Why Train Agent option is greyed out?

Train Agent option will be greyed out if there is missing data for some sensors. If you select the agent and check the sensor names in the right-hand panel, you will notice few sensors will be colored red. You need to perform audit sensor and update the sensor group to address this issue. Agent training is not allowed if there are lots of missing data.

#### Good Luck!