

TSI® FMS 5 SOFTWARE AEROTRAK® + REMOTE ACTIVE AIR SAMPLER SALES DEMONSTRATION SETUP & GUIDANCE

TECHNICAL BULLETIN TCC-192 (5/20/2021) Rev A

Introduction

This document will:

- 1. Provide step-by-step instructions for setting up FMS for the purpose of performing a sales demonstration with AeroTrak®+ Remote Active Air Sampler (AAS).
- 2. Provide suggestions for a successful live demonstration of FMS.

Key Take-Aways

- Building an FMS demo provides sales people a working knowledge of FMS Software and firsthand experience of its capabilities along with AeroTrak®+ Remote AAS.
- Demonstrating FMS with an AeroTrak+ Remote AAS builds a sales person's credibility and shows prospective customers ease-of-use.

Equipment

- An FMS compatible laptop, pre-configured with FMS 5.6.0 and network settings set in the same IP range as the AeroTrak+ Remote AAS device that will be used for this demonstration.
- FMS should be installed and configured by a qualified FMS Software specialist prior to performing these instructions.
- Device must already be setup with the AeroTrak+ Remote AAS App, if not then FMS will load the default AeroTrak+ Remote AAS settings saved during manufacturing.
- TSI Instrument Utility Software Program must be installed that will simulate a flow of 28.3 L/min for your demo of the AeroTrak+ Remote AAS. This Utility Software is available by downloading *TCC-192_supporting_files*.



Prior to Starting FMS

- With an ethernet cable, connect your AeroTrak+ Remote AAS device direct to the ethernet port on your laptop.
- Connect the TSI external power supply to your AeroTrak+ Remote AAS.

Installing TSI Instrument Utility Software Program

 Install TSI Instrument Utility Software by running InstrumentUtilitySoftware.exe. Click Next. 	InstrumentUtilitySoftware - InstallShield Wizard X Welcome to the InstallShield Wizard for InstrumentUtilitySoftware InstrumentUtilitySoftware The InstallShield(R) Wizard will install InstrumentUtilitySoftware on your computer. To continue, dick Next. WaRNING: This program is protected by copyright law and international treaties. Back Next > Cancel
3. Click Install .	InstrumentUtilitySoftware - InstallShield Wizard X Ready to Install the Program Image: Constall the Program The wizard is ready to begin installation. Image: Constall the Program If you want to review or change any of your installation settings, dick Back. Click Cancel to exit the wizard. Current Settings: Current Settings: Setup Type: Typical Destination Folder: C: \TSI Incorporated\Instrument Utility Software \ User Information: Name: TSI Inc. Company: TSI Inc. Company: TSI Inc. InstallShield
4. When installation is completed, click Finish .	InstrumentUtilitySoftware - InstallShield Wizard InstallShield Wizard Completed The InstallShield Wizard has successfully installed InstrumentUtilitySoftware. Click Finish to exit the wizard.

Setting Up Sample Points Before a Demonstration

A qualified FMS technical expert should install and configure FMS prior to beginning setup of sample points for demonstration purposes.

1. Before you begin, your screen should look similar to the one below.

FMS Clier	nt Client			- 🗆 X
Client Node	e Windows Help			
	🖇 🧶 😋 🌒 💈	🔹 🔳 [표 🚰 📍 🛥 🗞 🤸 📊 🕶	
Configured				Units Status
				Alarm Group Status
				Z Database_Status
Messages				
Node	Date/Time + Source	Туре	Message	
AAS	16-09-202 OPCU	Ok	OPC Server Ok	
AAS	16-09-202 AAS	Ok	Main Database Ok	
Local	16-09-202 Local	Ok	Monitor Has Connected AAS from 192.168.1.37	
Local	16-09-202 Local	Ok	Monitor Has Connected AAS from 192.168.1.37	
				16-09-2020 09:12:48

2. Go to Menu and select **Configure**.

FMS Client Client Node	t Client Windows Help ew	🤹 🗾 [m 🖉 ዋ 🚜 🗞 🔺 🖬 🗤	- 🗆 X
Confia # Co	ontrol			Units Status @
				Alarm Group Status
Messages		-		
AAS	16-09-202 OPCU	Ok	OPC Server Ok	
AAS	16-09-202 AAS	Ok	Main Database Ok	
Local	16-09-202 Local	Ok	Monitor Has Connected AAS from 192,168.1.37	
Local	16-09-202 Local	Ok	Monitor Has Connected AAS from 192.168.1.37	
				16-09-2020 09:17:02

3. Expand **Monitor Summary**, followed by expanding **Configure Device**.

FMS Clien Client Node	t Client Windows	Help	* 🎫 [a 🌌 🖣	• 🗠 🗞 🗳	k 航 191			- D	X
									onno oratuo	
Configuration Monitor 3 Configuration Configurat	on Summ ure D bTrak muni s tal Ou tal Ou tal Ou tal Ou tal Ou tal Ou s Groups s n Sett Settings	Serial Numb 123456 The A show Multi	eroTr up as cast A	ak®+ A a NEV	Sample Points	Status NEW utomatic with help	ally of the	Configure Create Disable Enable LED ALL LED OFF Delete	Alarm Group Status	E
Database Mirror Da VOk Messages	e Sett ataba							Refresh	I Database_Status	
Node	Date/Time	- Source	Туре			Messag	e			
AAS	16-09-202	OPCU	Ok	OPC Ser	ver Ok					
AAS	16-09-202	AAS	Ok	Main Data	abase Ok					
Local	16-09-202	Local	Ok	Monitor Ha	as Connected AA	S from 192.168	1.37			
Local	16-09-202	Local	Ok	Monitor Ha	as Connected AA	S from 192.168	1.37			
									16-09-2020 09:20	0:40

4. Select the new AeroTrak+ Remote AAS that is listed with help of Multicasting, then click **Configure** button.

B FMS Client Client							- 0	×
Client Node Windows	Help							
🛆 🖪 🔗 🧔 🤆) 🔊 💈 👍 📃	s 🕄 🏄 📍 🤕	G 🔸 📊 🛚	93				
Configured							Upits Status	6
AAS								
Configuration	Serial Number	IP / Port	Sample Points	Status	LED	Configure		
 Monitor Summary Configure Dev 	123456	192.168.1.93/502		NEW	OFF	Create		
AeroTrak+						Disable	Alarm Group Status	(
Communica						Enable		
Digital Outp						LED		
Sample Poi						ALL LED OFF		
Alarm Groups						Delete		
System Settings Monitor Settings Buddy Settings Database Settings Mirror Database Reporting Settings OPC UA Settings > SecurityPage							≩ Database_Status	
✓Ok ×Cancel						Refresh		
Messages								
Node Date	e/Time	Source T	/De	N	lessage			
AAS 16-09-202	0 09:12:27 OPCL	JABRIDGE Ok	OPC Serve	r Ok				
AAS 16-09-202	0 09:12:07 AAS	Ok	Main Datab	ase Ok				
Local 16-09-202	20 09:11:57 Local	Ok	Monitor Has	Connected AAS fr	om 192.168.1.37			
							16-09-2020 09:2	5:27

5. FMS Software will automatically load the settings from the AeroTrak+ Remote AAS that has been saved during AeroTrak+ Remote AAS setup with the AeroTrak+ Remote AAS App as shown below.

vice Settings				
evice Informati	on			
Serial Number *	123456			
Location	Filling_1			
IP Address	192.168.1 .93			
Port	502			
				Using DHCP
nit Information				
Unit Name *				
Comments				
Additional Comr	ments			
			En	able Debug Output
				able bookg o stpar
ominal Flow Rat	te 1.0			
alibration Setting	gs			
Calibration Al	arm Enabled 31	-10-2019		0
uffer Settings				
Enable Buffer	Download	Buffer Size	1440	4.9

- 6. From this point it is still possible to change the **Location** where the device is installed.
- 7. Enter a **Device Unit Name**, i.e. **U_AAS_FILLING_1**.
- 8. Enter a **Comment** for this Unit if required.
- 9. FMS configuration will set the next calibration date that you can enable by clicking the checkbox so that before the due date FMS will generate warnings for the device to be calibrated.
- 10. **Buffer Download** is enabled by default and cannot be changed. Please adjust the Buffer size to the desired value. Default value is **1440**.

	in			
evice Settings				
Device Informat	tion			
Serial Number	123456			
Location	Filling_1			
IP Address	192.168.1 .93			
Port	502			
				Using DHCP
Jnit Information	n			
Unit Name *	U AAS	FILLING 1		
Comments	AeroTrak	+ AAS installed near t	the Filling needle	
Additional Com	ments			
Additional Com	iments			Enable Debug Output
Additional Com	iments			Enable Debug Output
Additional Com	ate 1.0			Enable Debug Output
Additional Com Nominal Flow Ra Calibration Settin	ate 1.0			Enable Debug Output
Additional Com Nominal Flow Ra Calibration Settin Calibration A	ate 1.0 ngs Jarm Enabled 3	1-10-2019		Enable Debug Output
Additional Com Nominal Flow Ra Calibration Settin Calibration A Buffer Settings	ate 1.0 ngs larm Enabled 3	1-10-2019		Enable Debug Output

- 11. Go to **Sample Point** tab, followed by **Sample Point Settings**.
- 12. Enter a **Sample point Name** for the Device.
- 13. When **Sample Point Name** is created, click the **Plus** icon to add it to the **Sample Point List**.

Configure				× Configure			×
Device Sample Point				Device Sample Point			
Sample Point Settings Sample Point Rec	ipe			Sample Point Settings S	ample Point Recipe		
Sample Point List	Sample	e Point Informatio	on	Sample Point List		Sample Point Information	
Name	Samp	le Point Name	AS_FILLING_1		Name	Sample Point Name * AAS_	FILLING_1
	Display	Settings		AAS_FILLING_1		Display Settings	
	Comn Additi	nents onal Comments				Comments Additional Comments	
	_				-		
				Load from Template	Save to Template	ок	Cancel
Load from Template Save to	Template	ок	Cancel		The sample point AAS_I	FILLING_1 has been added.	

- 14. When finished, click **OK** button to save your new Device and Sample Point.
- 15. The newly created Sample Point is now listed and the Device is in a **PENDING** state which means that the changes have to be apply to the Device when FMS Configuration is saved.
- 16. Click **OK** button to save FMS Configuration and to apply changes to the AeroTrak+ Remote AAS device.

Configured							Units Status
AAS							
Configuration	Serial Number	IP / Port	Sample Points	Status	LED	Configure	
* Configure Dev	123456	192.168.1.93/502	AAS_FILLING_1	PENDING	OFF	Create	
AeroTrak+						Disable	Alarm Group Status
Communica Units						Enable	
Digital Outp						LED	
Sample Poi Recipes						ALL LED OFF	
Alarm Groups						Delete	
System Settings Monitor Settings Buddy Settings Database Settings Mirror Database Reporting Settings OPC UA Settings > SecurityPage	/						☑ Database_Status
VOk Cancel						Refresh	0
lessages							
	ite/Time -	Source	Туре	1	Message		
Node Da			OPC Serve	r Ok			
Node Da AAS 16-09-20	020 09:12:27 OPC	UABRIDGE 0	N OF O Derve	01			

17. Click Save button.

Configuration ×					
⚠	Configuration will be modified. Press Save to save changes or Cancel to quit				
	Save Cancel				

18. Click **Yes** to apply changes to the Device.

B Co	Configuration X						
⚠	Do you wish to apply chang Press Yes to reboot now o	ges immeo r No to re	liately. boot later				
		Yes	No				

19. Your screen should look like this:

BMS Client Clier	ıt				- 0	×
Client Node W	indows Help					
0	🤹 💽 🔳 🍍	🤹 🎫 🗄	: 🏄 S	P 🕰 🗞 🔺 📠 💖		
Configured					Units Status	Ø
S AAS-DEMO						
	H01			T01		
🧭 Value :	27.0 %	RH	۲	Value : 31.0 °C	U_AAS_FILLING_1	
					Alarm Group Status	ß
Messages Node	Date/Time	Source	Туре	Message Main Database Ok	Database_Status	
AS-DEMO	24-04-2021 10.10.27	A S-DEWO				
Local	24-04-2021 10:17:48	Local	Ok	Monitor Has Connected AAS-DEMO from 192.168.1.36		
					24-04-2021 10:1	9:20

NOTE: AeroTrak+ Remote AAS Sample Points are not displayed on the Main screen. From the Main Screen Sample Point, no action is possible.

Creating AeroTrak+ Remote AAS Programs

An AAS program is a sampling program that can be assigned to one or more AeroTrak+ Remote AASs. When started, an AAS program will automatically sample a user-defined volume of air during a predefined time with or without a user-defined delay time prior to starting. The sample volume can be sampled in a user-defined number of fractions over the course of the user-defined time.

AAS Programs Window allows new AAS Program to be added. They can also be edited or deleted, always be available for recall during reports.

FMS can store up to 100 different AAS programs. If a user does not have AAS **Edit** Program permissions assigned, FMS will hide the **AAS Programs** icon.

Definition of the different fields of a program:

Field Label	Description	
Total Volume	Desired volume to be sampled by the AAS Program.	
Number Fractions	Desired number of fractions to be sampled by the AAS Program.	
Total Sample Time	Desired sample time of the AAS Program. The sampletTime is the total amount of time to complete the program. The total time can be split into fractions.	
Fractional Sample Time	Amount of sampling time per fraction of the AAS Program.	
Delay Time	Desired delay time used by the AAS Program. The delay time is the amount of time the program will wait after starting before beginning its sampling.	
Inter-fraction Hold Time	Amount of hold time per fraction of the AAS Program.	
Calculate Time	Calculate time button is used to calculate the sampling times and hold times based on the total volume and number of fractions of the AAS Program.	

Pre-Fill Program Example—A single fraction where the total volume is sampled continuously.



2 Hour-Fill Program Example—Four sample fractions where the total volume is sampled in four equal fractions with an interfraction hold time that is dependent upon the total samplet time defined by the user.



1. Click the **AAS Status** icon.

😨 FMS Client Clier	nt				_		×
Client Node W	/indows Help		_				
0 🖪 🖗	🦻 🕑 💐 🌷	🤹 🎫 🗄	9 🚣 9	P 🕰 🗞 🗼 📊 ฑ			
Configured			-	_	Units Sta	tus	6
S AAS-DEMO	0						
	H01			T01			
🧭 Value	: 38.0	%RH	Q) Value : 21.0 °C	⊘ U_A4	∖S_FILLI	NG_1
					Alarm Gr	oup Stat	us @
Messages Node AAS-DEMO Local	Date/Time 24-04-2021 10:18:27 24-04-2021 10:17:48	Source AAS-DEMO Local	Type Ok Ok	Message Main Database Ok Monitor Has Connected AAS-DEMO from 192.168.1.36	🤡 Datat	oase_Sta	atus
					24-04-20	21 10:24	:35

2. Active AAS Programs screen will open.

B FMS Client	t Client				- 🗆 ×
Client Node	Windows Help		D Ja A	4 M. 941	
	> % 🔍 🖷 🐐	🤏 🎫 🖬 📶 🦷	r 🛥 18	2 1 ali	Unite Ctatus
Configured					
O AAS					BULAAS EILLING 1
Setup	Active AAS Prog	grams			O U_AAS_FILLING_I
Select Pr	ogram grams				Alarm Group Status 🛛 🖗
					≆ Database_Status
Messages					
	Date/Time *	Source	Туре	Message	
Node			Ok	Main Database Ok	
Node AAS	16-09-2020 11:29:03	AAS	Un	India Database en	
Node AAS AAS	16-09-2020 11:29:03 16-09-2020 11:29:03	OPCUABRIDGE	Ok	OPC Server Ok	
Node AAS AAS Local	16-09-2020 11:29:03 16-09-2020 11:29:03 16-09-2020 11:28:53	OPCUABRIDGE	Ok Ok	OPC Server Ok Monitor Has Connected AAS from 192,168.1.37	

3. Double-click the **TSI Instrument Utility Software Program** icon on your desktop.

Device ID Model Serial Firmwa	Information No. No.	Device Selection BioTrak Ethernet IP	Search Device
Set Contro BioTra	k Active Air Sampler 711	0	
	Sample Flow	PMT A Voltage	Temperature Control
	Concentrator Flow	PMT B Voltage	Red Laser
	Sheath Flow	APD	Laser Scatter
	Concentrator	Algorithm Corrupt	Blue Laser
			Clear Error
			^

4. From the **Device Selection** drop-down box, select **Active Air Sampler**. Enter the IP address of your AAS and click **Search device**. **Search Device** button will change to **Disconnect Device** when the AAS is found.

😨 Instrument Utility Software Version 1.1.0.0			- 0	×
Device ID Information Model No.: 7010-090 Serial No.: 123456 Firmware: 1.01	Device Selection Active Air Sampler Ethernet IP 192.168.1.93	Discon	nect Device	I
Set Control BioTrak Active Air Sampler 71 Flow Mimic	10			
		Reboot Device		
Searching device Found.			^	

5. Click **Flow Mimic** button to simulate 28.3 L/min flow rate for the AAS.

B Instrument Utility Software Version 1.1.0.0			- 0	\times
Device ID Information Model No.: 7010-090 Serial No.: 123456 Firmware: 1.01	Device Selection Active Air Sampler Ethernet IP 192,168,1.93	~	Disconnect Device	
Set Control BioTrak Active Air Sampler 7110 Flow Mimic		Reboot	Device	
Searching device Found.			×	

NOTE: DO NOT close the TSI[®] Instrument Utility Software during your demo.

6. Click Edit Programs button to access the Program Config.

🔳 Program Config		? ×
Sele	ct Program	Add Program
		Remove Program
AAS Program Name:	AAS_Program_1	
Total Volume:	1,00 ‡ ○ L ● m3 ○	ft3
Number Fractions:	1	Calculate Time
Total Sample Time:	00:35:23 🗘 Fractional San	nple Time: 00:00:00
Delay Time:	00:00:00 🗘 Inter-fraction H	Hold Time: 00:00:00
Sample Points		
AAS_FILLING_1	< > << >>	
	Apply	OK Cancel

- 7. Click Add Program.
- 8. Enter **Program Name**, i.e. **Pre-Fill**.

AAS Enter Program Name	?	\times
Enter New Program Name		
Pre-Fill		
	OK	Cancel

- 9. Click OK.
- 10. Enter settings for **Pre-Fill**, i.e. like shown below, and click **Calculate Time** button to calculate **Sampling Time** and **Hold Time** based on the **Total Volume** and **Number of Fractions**.

Program Config	? ×
Select Program	Add Program
AAS Drogram Name: Dra Eill	Remove Program
Total Volume: 1 00 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ft3
Number Fractions:	Calculate Time
Total Sample Time: 00:35:21 🗘 Fractional Sam	nple Time: 00:35:21
Delay Time: 00:00:00 🗊 Inter-fraction F	lold Time: 00:00:00
Sample Points	
AAS_FILLING_1 <	
Apply	OK Cancel

- 11. In **Sample Points** list, select the Sample Point(s) to which this program is assigned.
- 12. Click > button to move the selected Sample Point(s) to the right frame.
- 13. Click **Apply**, followed by **OK**.

Program Config	? ×
Select Program	Add Program
Pre-F III	Remove Program
AAS Program Name: Pre-Fill	
Total Volume: 1,00 ♀ ○ L ● m3 ○	ft3
Number Fractions: 1	Calculate Time
Total Sample Time: 00:35:21 🗘 Fractional Sam	nple Time: 00:35:21
Delay Time: 00:00:00 🗘 Inter-fraction H	Hold Time: 00:00:00
Sample Points	
AAS_FIL	LING_1
Apply	OK Cancel

14. Repeat the same step shown above to create the **2 Hour-Fill** Program.

Program Config		? ×
Selec	t Program	Add Program
Pre-Fill		
2hr-Fill		
		Remove Program
AAS Program Name:	2hr-Fill	
Total Volume:	1,00 ‡ ○ L ● m3 ○	⊃ ft3
Number Fractions:	4	Calculate Time
Total Sample Time:	02:00:00 🗘 Fractional Sa	mple Time: 00:08:51
Delay Time:	00:00:00 🗍 Inter-fraction	Hold Time: 00:28:12
Sample Points		
	< AAS_FI	LLING_1
	>	
	>>	
	Apply	OK Cancel

15. Click **OK** to return to **Active AAS Programs** screen.

Setup	Active AAS Programs	
Select Program		
Edit Programs		

Five Minute FMS Demonstration

It is effective to point out that all three functions of FMS are operating on your laptop computer. FMS can operate as simply as a single computer or it can be deployed in a completely distributed design to provide *reliability* and *redundancy* with *Buddy* backup monitor.



Describe the color coding (note colors setting can be changed by users).

State	lcon	Text Color	Meaning
No Measurement	X	White.	Indicates an idle state. This means that the system is waiting for the first data to be received after starting. This can also mean there is a problem if an item remains white for a long period of time.
Venice	✓	<mark>Green.</mark>	Indicates an item is OK. The currently measured values are not outside any alarm or warning limits and any associated equipment has not failed.
wamng	•	Yellow	Indicates the item is in a warning state.
Alam	8	Red .	Indicates the item is in an alarm state. Usually when a sample point enters an alarm state, it
Failure			requires acknowledgement. The item will be shown in cyan until the alarm is acknowledged. The icon associated with the item changes to reflect the current alarm state of the item.
Need Ack.		D A R K B L U E	Marks that an item has failed. Usually there will be some Notes to indicate the reason for the failure.

Symbols to the left of the sample point name indicate the current condition of the sample point (e.g. the sample point could be light blue indicating an acknowledgement is required, but have a green checkbox next to the name indicating it is currently **NOT** operating within alarm limits).

Demonstrating AeroTrak+ Remote AAS Programs

- 1. Once AAS sample points are configured and one or more Programs are defined, you can now run sampling Program by following these steps.
- 2. From the Active AAS Programs screen, click Select Program.



- 3. Select Pre-Fill Program and click OK.
- 4. **Pre-Fill** Program appears on the **Active AAS Programs** window.

etup	Active AAS Programs			
Select Program	Pre-F	Fill		
Contraction of the local division of the loc	Status: Idle	0%		
ait Programs		Close		

5. Click once on the **Pre-Fill** Program so that the AAS Program window shows up.

😨 AAS Progra	am				×		
Start Program: Pre-Fill							
Start Time: ·	Start Time: Details						
End Time:	;				Total Volume: 1.00 m3 Number Fractions: 1 Total Duration: 00:35:21		
Status: Idle		0%			Delay Time: 00:00:00		
Total Run		0%			Fraction Time: 00:35:21 Hold Time: 00:00:00		
Sample Poin	Sample Points Included						
	State	Agar Plate ID	Volume	Serial Num	ber Calibration Date		
AAS_FILLI	VG_1						
					Close		

6. Click on the **Agar Plate ID** for the **AAS_FILLING_1** Sample Point and enter the **Agar Plate ID**.

😨 AAS Program	×						
Start Program: Pre-Fill							
Start Time:::	Details						
End Time:::	Total Volume: 1.00 m3						
	Number Fractions: 1						
	Total Duration: 00:35:21						
Status: Idle 0%	Delay Time: 00:00:00						
Total Run 0%	Fraction Time: 00:35:21						
	Hold Time: 00:00:00						
Sample Points Included							
State Agar Plat	e ID Volume Serial Number ra						
AAS_FILLING_1 123456							
	Close						

7. Click **Start** button. When **Start** button is clicked, **Abort** button is displayed allowing the AAS Program to be stopped.

🕉 AAS Program							×
Abort Program: Pre-Fill							
Start Time: 16-09-2020 12:43:31 Details							
End Time: 16-09-2020 13:18:52					Total Volume: 1.00 m3 Number Fractions: 1		
Status: Sampling		2%			Delay Time: 00:00:00		
Total Run		2%			Fractic Ho	on Time: 00:35:2 Id Time: 00:00:0	1 0
Sample Points Included							
	State	Agar Plate ID	Volume	Ser	rial Number	Calibration Dat	е
AAS_FILLING_1	OK	123456	0.03		123456	31-10-2018	
						Clos	е

8. The **Close** button can be clicked to return to the **Active AAS Programs** that shows which programs are currently running. By clicking once on the **Pre-Fill** program, you will return to the **AAS Program**.

S AAS		
Setup	Active AAS Programs	
Select Program Edit Programs	Pre-Fill Status: Sampling Progress: 8% Close	
[AAS Program ×	
	Abort Program: Pre-Fill	
	Start Time: 16-09-2020 12:43:31 Details	
	End Time: 16-09-2020 13:18:52 Total Volume: 1.00 m3 Number Fractions: 1	
	Status: Sampling 11%	
	Table Deray Time: 00:00:00	
	Hold Time: 00:00:00	
	Sample Points Included	
	State Agar Plate ID Volume Serial Number Calibration Date	
	AAS_FILLING_1 OK 123456 0.11 123456 31-10-2018	
	Close	

9. When the program is finished, you can close it by clicking **Close** button followed by **Yes** to confirm.

S AAS		
Setup	Active AAS Programs	
Select Program	Pre-Fill	
Edit Programs	Status: Idle Program Complete	
Lait rograms	Close	
	Confirm Close of AAS Progr ×	

■ Confirm Close of AAS Progr ×								
? Close "Pre-Fill"								
Are You Sure?								
Yes No								
	of AAS Pr re-Fill" Sure? <u>Y</u> es							

10. Demonstrate where you can create AAS reports.

🕏 FMS Client Client	- 🗆 X
Client Node Windows Help	
🙆 🖪 🗇 🦸 🖸 🔍 🔹 🗱 🔛 🌌 ዋ 🚜 🗞 🔺 📶 👐	
Configured	Units Status
AAS Report Description: Click on the Report Icon	OU_AAS_FILLING_1
New	Report Alarm Group Status
Scheduled Reports Scheduled Reports	iew rrint odify SV elete ♥ Database_Status
Messages	
Node Date/Time - Source Type Message	
Local 17-09-2020 13:08:59 Local Ok Monitor Has Connected AAS from 192,168.1.37	
	17-09-2020 13:12:24

11. Show highlights of the new AAS report screen.

B FMS Client Clie	ent					- 🗆 X
Client Node W	indows Help					
	藆 🕲 🌒 💐 🤹 🦉	🖪 🚰 🜳 🛥 🗞 🔳	1. 191			
Configured						Units Status
AAS						
Report Details						U_AAS_FILLING_1
Name	AASDemoReport					
Title	AAS Demo Report					Alarm Group Status
Report Type	Normal Report ~					
Footer	Default Footer +					
Report Data	AAS Program Data			AAS S	ummar	
					Index 🗸	
Start Time	Previous 2 Weeks	• 13.17	* 03-09-20			
End Time	Current Date-Time	- 13:16	17-09-20			
Add Sign (Off Table	1	Signatures			
AA	AS Sample Points	Logs and Messag	es Sche	dule Report		O Database_Status
		_		VOk	Cancel	
Messages						
Node D	ate/Time · Source Ty	pe	Message			
Local 17 13	-09-2020 :08:59 Local Ok	Monitor Has Connected AAS	from 192.168.1.37			
						17-09-2020 13:18:45

E,

AAS Demo Report AASDemoReport From: 17-09-2020 09:23:23 To: 17-09-2020 13:23:23 Results Table For: Audit Log

Results Table For: Audit Log					
Date Time	Source	Comment			
17-09-2020 10:58:31	FMS_Client	Client Has Started			
17-09-2020 10:59:16	FMS_Client	Started 2hr-Fill (TotalDuration 02:00:00, TotalVolume 1.00m3, NumberOfFractions 4, delay 00:00:00) on AAS_FILLING_1 using plateid 123			
17-09-2020 12:07:38	FMS_Client	Stopping the AAS OPC UA Server Task			
17-09-2020 12:09:24	FMS_Client	Stopping the AAS OPC UA Server Task			
17-09-2020 12:10:25	FMS_Client	Restarting the AAS OPC UA Server Task			
17-09-2020 13:08:59	FMS_Client	Client Has Started			
17-09-2020 13:21:13	FMS_Client	Making Report AASDemoReport For AAS As			
17-09-2020 13:22:24	FMS_Client	Making Report AASDemoReport For AAS As			

E,

AAS Demo Report AASDemoReport From: 17-09-2020 09:23:23 To: 17-09-2020 13:23:23 Results Table For: PlateID: 123 Location: AAS_FILLING_1

PlateID: 123, Location: AAS_FILLING_1, SerialNumber: 123456							
Date Time	Event	Fraction	Cum. Volume (m3)	Event Details			
17-09-2020 10:59:22	Start Sampling	1	0	Started			
17-09-2020 11:08:13	Stop Sampling	1	0.25				
17-09-2020 11:36:25	Start Sampling	2	0.25				
17-09-2020 11:45:16	Stop Sampling	2	0.5				
17-09-2020 12:13:28	Start Sampling	3	0.5				
17-09-2020 12:22:19	Stop Sampling	3	0.75				
17-09-2020 12:50:31	Start Sampling	4	0.75				
17-09-2020 12:59:22	Stop Sampling	4	1	Completed			

After two 2-hour practice sessions using this document as a guide, you should be capable of efficiently demonstrating FMS.

Revision History

Revision	Released	Description
А	20 May 2021	Initial Release

AeroTrak, TSI and the TSI logo are registered trademarks of TSI Incorporated in the United States and may be protected under other country's trademark registrations.



UNDERSTANDING, ACCELERATED

TSI Incorporated - Visit our website www.tsi.com for more information.

USA	Tel: +1 800 680 1220	India	Tel: +91 80 67877200
UK	Tel: +44 149 4 459200	China	Tel: +86 10 8219 7688
France	Tel: +33 1 41 19 21 99	Singapore	Tel: +65 6595 6388
Germany	Tel: +49 241 523030		

Technical Bulletin TCC-192 Rev A