

# **F** Analytics<sup>™</sup> GuardianAl<sup>™</sup>

# **Quick Installation Guide**

# **Version 1.00.00**

Rockwell Automation Publication FTGAI 95055-IN010A-EN-P



**Original Instructions** 

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# **Edge Manager Deployment**

This section provides information about deploying FactoryTalk Analytics GuardianAl using FactoryTalk Edge Manager.

# **Prerequisites**

Ensure the following prerequisites are fulfilled.

- Edge Node Minimum Hardware Spec
  - Processor: Intel Atom 4 core
  - Ram: 8 GB
  - SSD: 120 GB
- Edge Node is certified for Deployment with FactoryTalk Edge Manager
- FactoryTalk Edge Manager access and license are available
- FactoryTalk Analytics GuardianAl application license is available
- Ensure that the Edge Node is onboarded and status is Online
- Client PC Accessing FactoryTalk Analysis GuardianAl
  - OS Windows
  - Web Client: Chrome or Edge

# **Getting Started**

FactoryTalk Analytics GuardianAl has the following two containers within Edge Manager used to deploy the application.

- FT-GuardianAl-Redis: The database container used by FactoryTalk Analytics GuardianAl.
- FT-GuardianAI: The FactoryTalk Analytics GuardianAI application container.

Perform the following steps to import the FactoryTalk Analytics GuardianAl application from Marketplace:

1. Navigate to the Marketplace on the left navigation panel and click Edge Apps.

FT Edge   GuardianAl non-prod		All I	Projects 🔹 😗	<b>R</b> ∼
Dashboard     C Edge Apps				∀ +
Edge Nodes 🗹 Local Edge Apps 🖬 Global Edge Ap	ps			
Edge App Instances Categories	Edge Apps added in the Enterprise			
Cluster Instances Analytics & Data Management (4)		and a	8 <u>8</u>	1
E Library	FT-GuardianAl-Redis.development Analytics & Data Management	FT-GuardianAl-Redis.prerelease Analytics & Data Management	FT-GuardianAl.development Analytics & Data Management	
@ Reports	memory data store pre-configured for intern less by FT GuardianAI. All external network	memory data store pre-configured for intern cess by FT GuardianAI. All external network	chine learning based supervisory applicati at uses existing plant devices, such as varia	or
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🐨 Marketplace 📰 Edge Apps	<b>4</b>			
Administration Addris	FT-GuardianALperelease Analytics & Data Management schine learning based supervisory application it uses existing plant devices, such as variab			
	• 2 Installs 🗊 🎝			

2. Go to the Global Edge Apps tab, scroll down and click the FT-GuardianAl-Redis app from the list.

Edge Manager	FT Edge   GuardianAl non-prod		A	l Projects 👻	<b>€</b> ®~
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1 Edge Nodes	🗠 Local Edge Apps 🔄 Global Edge App	15			
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E Library		<u>.</u>	<u></u>	<b>\$</b>	
🖶 Reports		FEGIS FT-GuardianAl-Redis.development License: redis license	reals FT-GuardianAl-Redis.prerelease License: redis license	FT-GuardianAI.developmen License: Unknown	t
Jobs					
🗑 Marketplace		Container     Imported	Container     Imported	Container     Import	ed
Administration		<b>e</b>	cm 🖧	(FT Optix	
		FT-GuardianAl.prerelease License: Unknown	FT-Optix-Boiler-Demo.development License: Unknown	FT-Optix-Boiler.developmen License: Unknown	τ
		Container     Imported	Container	• Container	S.

- 3. Check the details and click the import icon [  ${}^{
  m \mbox{\sc on}}$  ].
- 4. Repeat the step for FT-GuardianAl and click the import icon [ 🐷 ].
- 5. Both the FT-GuardianAl-Redis and FT-GuardianAl will be now available on the Local Edge Apps.

Edge"Manager	FT Edge   GuardianAl non-prod		-	All Projects 💌	1	RR ~
② Dashboard	Edge Apps				7	र +
Edge Nodes	🖄 Local Edge Apps 📄 Global Edge App	5				
Edge App Instances	Categories	Edge Apps added in the Enterprise				
Cluster Instances	Analytics & Data Management (4)		e dia			
E Library		FT-GuardianAl-Redis.development Analytics & Data Management	FT-GuardianAl-Redis.prerelease Analytics & Data Management	FT-GuardianAl.develo Analytics & Data Manaj	pment	
@ Reports		memory data store pre-configured for intern cess by FT GuardianAI. All external network	nemory data store pre-configured for inter ess by FT GuardianAI. All external network	r ichine learning based supervis at uses existing plant devices,	ory application such as variab	17 2
四 Jobs		• O Installs 🗊 🛱	🔹 4 Installs 🗍 🛱	0 Installs	Û 4	
🗑 Marketplace		-				
Administration		FT-Guardinal, preclease Analytics, & Data Management Shine Harming backed supervisory application Lives existing plant devices, such as varial 2 Installs				

# Deploy FactoryTalk Analytics GuardianAl Redis Database

Perform the following steps to deploy the FactoryTalk Analytics GuardianAl Redis database.

1. On the left navigation panel, go to the Marketplace and click Edge Apps.

**NOTE:** It is important to first deploy the **FT-GuardianAl-Redis** application before the main FT-GuardianAl.

Edge Manager	FT Edge   GuardianAl non-prod		IIA	Projects 🔹 🕄	RR ~
② Dashboard	Edge Apps				∀ +
Edge Nodes	🗠 Local Edge Apps 🔲 Global Edge App:	5			
Edge App Instances	Categories	Edge Apps added in the Enterprise			
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Reports		memory data store pre-configured for intern cess by FT GuardianAI. All external network	memory data store pre-configured for intern tess by FT GuardianAI. All external network	chine learning based supervisory applica at uses existing plant devices, such as var	tior iab
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Marketplace		<u> </u>	Deploy		
203 Administration		FT-GuardianAI.prerelease Analytics & Data Management			
		chine learning based supervisory application at uses existing plant devices, such as variab			
		• 2 Installs			

2. Click the [ ] icon on FT-GuardianAl-Redis to deploy the app

The **Add Edge App Instance** page displays.

3. On the Edge App & Edge Nodes tab, provide the following details and Click Next.

NOTE: It is recommended to set the other details as defaults.

- **Project**: Select the project from the drop-down list.
- Number of Deployments: Select Single for single deployment.

D	Select an edg	je node from	selected Proj	ject: Select the	appro	priate Edu	ge Node
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Edge Hanager	FT Edge   GuardianAl non-prod				S @~
② Dashboard	< Back to Edge App Instances / Add Edge App Instance				
Êmp Edge Nodes	🕕 Edge App & Edge Nodes	(2) Edge App Instance Identity	3 Adapters & Networks	(4) Custom Configuration	(5) Review & Deplay
Edge App Instances	Select the Edge App and Number of Deployments.				
Cluster Instances	Edge App * FT-GuardianAl-Redis.prerelease	X Show Less	roject <sup>e</sup> DefaultEdgeGatewayProjectPolicy	× ]	Number of Deployments*
🖨 Library	Drives				
🛱 Reports	Tag	Image	Encrypted	Purge	
2 July		() FT-GuardianAl-Redis-1.0.0-prerelease.16	Yes	Yes	
F3 1002		② Storage-Disk-FactoryTalkAnalyticsGuardianAl	Yes	No	
Warketplace	Resources				
Administration	CPUs Memory				
	2 4.00 GB				
	Please select an edge node from selected Project.				
	Name +	Serial Number	EVE-OS Image Version	Location	Edge App Instances Load
	• -TestNode1	BAM0453000001	11.0.2-Its-kvm-amd64	20147, Ashburn, US	Low
	• -TestNode2	BTAN331001LD	11.0.2-lts-kvm-amd64	53201, Milmaukee, US	High
	• -TestNode3	BTAN331001AM	11.0.2-Its-kvm-amd64	20147.Ashburn.US	High
	Showing 1 to 4 of 4 entries   1 Selected				
(?) Help Center	α				Cancel Next

- 4. On the Edge App Instance Identity tab, provide the following details and click Next.
  - Name: Provide a unique application name. The application name cannot be changed.
  - **Title**: Provide a title.
  - **Description**: Provide a detailed explanation about Edge App instance.

🕕 Edge App & Edge Nodes	2 Edge A	pp Instance Identity	Adapters & Networks	(4) Custom Configuration	5 Review & Deplo
elect Name, Title and a common D	escription for all	instances.			
ame* Redis-TN1	0	Title * Redis-TN1			
Description					
nable Logs Access Yes raggered Start Delay		() To override	Maximum Virtualization Overhead	Memory	
0 Second(s)	×	VMM Overh	ead		

5. On the Adapter & Networks tab, select the Network Instance from the drop-down list, review the details

and click <b>Next</b> .			
Edge Manager	FT Edge   GuardianAl non-prod		<b>1</b>
② Dashboard	< Back to Edge App Instances / Add Edge Ap	op Instance	
🚑 Edge Nodes	1 Edge App & Edge Nodes	Edge App Instance Identity 3 Adapters & Netwo	works ④ Custom Configuration ⑤ Review & Deploy
Edge App Instances	Assign Edge Node resources to the Edge App	o's adapters and review Firewall Rules if any.	
Cluster Instances	Network Adapters		
<b>A</b> 11	Network Adapter Name	Firewall Rules	Network Instance*
- Library	Eth0	Edge App Configured	⊘ defaultLocal-GuarianAl-TestNode1 × ⊙
Reports			
評 Jobs			
💭 Marketplace			
ô Administration			
Help Center			Cancel Previous Next

- 6. The Custom Configuration page is displayed. The Redis database has no custom configuration parameters.
- 7. Click Next.

#### 8. On the **Review & Deploy** tab, review all the selected options and click **Deploy**.

Edge Manager	FT Edge   GuardianAl non-prod				10 B			
Dashboard	< Back to Edge App Instances / Add Edge	Back to Edge App Instances / Add Edge App Instance						
Ême Edge Nodes	1 Edge App & Edge Nodes	② Edge App Instance Identity	Adapters & Networks	Custom Configuration	n (5) Review & Deploy			
Edge App Instances	Review selected Edge App & Edge Node(s)	before requesting deployment.						
Cluster Instances	Selected Edge App Bundle details sum Drives	mary: FT-GuardianAl-Redis.prerelease						
🖹 Library	Tag	Image	Encrypted	Purge	Mount Path			
🖨 Reports		Case.16	Yes	Yes				
掲 Jobs		CStorage-Disk-FactoryTalkAnalytics GuardianAl	Yes	No	/data			
ີ∰ Marketplace	Resources CPUs Memory							
Administration	2 4.00 GB							
	Selected Edge Node deployment deta Edge App Instance + Redis-TN1 Showing 1 to 1 of 1 entries	ls,   Edge N ● Guar	de IanAl-TestNode1	Project DefaultEdgeGatewayProjectPolicy Records per pag	e 20 ▼ K < 1 → X			
(?) Help Center					Cancel Previous Deploy			

You can click **Previous** to return to the previous tabs and edit or update the details.

9. The FactoryTalk Edge Manager will deploy to the edge node and provide a status update as Redis gets loaded and updates to a running status.

NOTE: The initial status will display as Invalid, this is normal while FactoryTalk Manager

initiates the deployment.



10. The Edge App Instance will also provide a status view of the Redis database.

**NOTE:** Look for the unique application name created in step 4.



# **Deploy FactoryTalk Analytics GuardianAl**

Perform the following steps to deploy the FactoryTalk Analytics GuardianAl application.

1. On the left navigation panel, go to the Marketplace and click Edge Apps.

NOTE: Note: It is important to first deploy the FT-GuardianAl-Redis application before the main FT-GuardianAl.

FT Edge Manager	FT Edge   GuardianAl non-prod			All Projects	S	RR ~
Dashboard	Edge Apps					∀ +
Êmp Edge Nodes	🗠 Local Edge Apps 📅 Global Edge Apps					
Edge App Instances	Categories	Edge Apps added in the Enterprise				
Cluster Instances	Analytics & Data Management (4)		۲			
🖻 Library		FT-GuardianAl-Redis.development Analytics & Data Management	FT-GuardianAl-Redis.prerelease Analytics & Data Management	FT-GuardianAl.developme Analytics & Data Manageme	nt	
Reports		n-memory data store pre-configured for interna ccess by FT GuardianAI. All external network	n-memory data store pre-configured for inte ccess by FT GuardianAI. All external network	rna fachine learning based supervisory a nat uses existing plant devices, such	pplication as variabl	1
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🗑 Marketplace		ê				
Administration		FT-GuardianAI.prerelease Analytics & Data Management				
		tachine learning based supervisory application hat uses existing plant devices, such as variabl				
		• 2 Installs				
		Deploy				
(2) Help Center	Showing 1 to 4 of 4 entries			Records per page 9	K 4 1	F 31

2. Click the [ 💁 ] icon on FT-GuardianAl to deploy the app

The Add Edge App Instance page displays.

3. On the Edge App & Edge Nodes tab, provide the following details and Click Next.

NOTE: It is recommended to set the other details as defaults.

- **Project**: Select the project from the drop-down list.
- Number of Deployments: Select Single for single deployment.
- Select an edge node from selected Project: Select the appropriate Edge Node.

		-				·	
(	FF Edge Manager	FT Edge   GuardianAl non-pr	od				© @-
Ø	) Dashboard	< Back to Edge App Instances / Ad	d Edge App Instance				
čιø	Edge Nodes	1 Edge App & Edge Noo	(2) Edge App In	itance Identity ③ Adapters	& Networks	Gustom Configuration	(5) Review & Deploy
	Edge App Instances	Select the Edge App and Number o	f Deployments.				
82	Cluster Instances	Edge App * FT-GuardianAl.prerelease	× Show Less	Project * DefaultEdgeGatewayProjectPolicy	*	Number of Deployments *	×
۲	Library	Drives					
¢	Reports	Tag	Image	Encrypted	Purge	Mount P	ath
阳	Jobs		() FT-GuardianAl-1.0.0-	irerelease.16 Yes	Yes		
		Resources					
.8	Marketplace	CPUs Me	mery				
٢	Administration	2 4.01	GB				
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		TestNoo	le1 BAM0453000001	11.0.2-lts-kvm-amd64 53	3201,Milwaukee,US	Medium	· · · · · · · · · · · · · · · · · · ·
		O • -TestNor	e2 BTAN331001L0	11.0.2-lts-kvm-amd64 5:	3201,Milwaukee,US	High	· · · · · · · · · · · · · · · · · · ·
		O • -TestNoo	le3 BTAN331001AM	11.0.2-lts-kvm-amd64 20	0147,Ashburn,US	High	
		Showing 1 to 4 of 4 entries	1 Selected			Records per page 20	$\bullet  \bullet  \bullet  \bullet  \bullet  \bullet  \bullet  \bullet  \bullet  \bullet $
0	Help Center						Cancel Next

4. On the Edge App Instance Identity tab, provide the following details and click Next.

- Name: Provide a unique application name. The application name cannot be changed.
- **Title**: Provide a title.
- **Description**: Provide a detailed explanation about Edge App instance.

1 Edge App & Edge	Nodes	2 Edge A	pp Instance Identity	3 Adapters & Networks	(4) Custom Configuration	(5) Review & Depl
Select Name, Title and a	common Descr	iption for all in	stances.			
Name *			Title *			
GAI-TN1			GAI-TN1			
escription						
Description						
nable Loge Assess						
Yes						
taggered Start Delay			🕧 To override N	Aaximum Virtualization Overhead M	lemory	
0 5	Second(s)	×	VMM Overhe	ad		
ags						
		•				

5. On the Adapter & Networks tab, select the Network Instance from the drop-down list, review the details

and click <b>Next</b> .				
Edge Manager	FT Edge   GuardianAl non-prod			Ý ®~
② Dashboard	< Back to Edge App Instances / Add Edge Ap	p Instance		
📇 Edge Nodes	🚺 Edge App & Edge Nodes (	Edge App Instance Identity 3 Adapters & Net	works ④ Custom Configuration	(5) Review & Deploy
Edge App Instances	Assign Edge Node resources to the Edge App	's adapters and review Firewall Rules if any.		
Cluster Instances	Network Adapters			
	Network Adapter Name	Firewall Rules	Network Instance*	
E clorary	Eth0	Edge App Configured	⊘ defaultLocal-GuarianAl-TestNo	de1 × 🛇
Reports				
評 Jobs				
`₩ Marketplace				
🔞 Administration				
Help Center			Can	el Previous Next

- 6. The Custom Configuration page is displayed. The FactoryTalk Analytics GuardianAl application has the following parameters to configure
  - a. **Redis Connection String:** Default value is set to connect to the Redis Database. This parameter is the reason why it is important to deploy the Redis Application before FactoryTalk Analytics GuardianAl.
  - b. **Admin Password:** The FactoryTalk Analytics GuardianAl has a main login page. This parameter sets the password for the login screep to access the application

	ie iogili screen to a	ccess the applicatio	11		
Edge Manager	FT Edge   GuardianAl non-prod				10 🔍 😡 -
Dashboard	< Back to Edge App Instances / Add E	dge App Instance			
Edge Nodes	1 Edge App & Edge Nodes	2 Edge App Instance Identity	③ Adapters & Networks	(4) Custom Configuration	(5) Review & Deploy
Edge App Instances	Configure settings for the Edge App In	nstance that are applied when the instance :	starts.		
Cluster Instances	FT-GuardianAl-config				
🖹 Library	FT-GuardianAl-config Redis Connection String*	Admin Password	*		
Reports	10.1.0.128:6379	Show Parrie	ard		
Jobs		JIIOW P055W			
🛱 Marketplace					
Administration					
Help Center				Ca	ncel Previous Next

- 7. Click Next.
- 8. On the Review & Deploy tab, review all the selected options and click Deploy.

(	FT Edge Manager	FT Edge   Guar	dianAl non-pro	d				<b>(</b> ) <b>(R</b> ) ~
Ø	Dashboard	< Back to Edge App	Instances / Add	Edge App Instance				
Ĵ.,	Edge Nodes	(1) Edge App &	Edge Nodes	2 Edge App Instance Ider	tity ③ Adapters & Netw	orks 🚳 Custom	Configuration	(5) Review & Deploy
	Edge App Instances	Review selected E	dge App & Edge N	ode(s) before requesting deploym	ent.			
12	Cluster Instances	Selected Edge A	op Bundle detail	s summary: FT-GuardianAl.prei	elease			
Ē	Library	Tag		Image	Encrypted	Purge	Moun	t Path
	Reports			Case.16	2 Yes	Yes	•	
<b>S</b> E	lahr	Resources						
1	1003	CPUs	Memory					
Å	Marketplace	2	4.00 GB					
6	Administration							
		Selected Edge N	ode deployment	details.				
		Edge App Ins	tance ↑		Edge Node	Projec	ct	
		GAI-TN1			GuarianAl-TestNode1	Defau	ltEdgeGatewayProj	ectPolicy
		Showing 1 to	1 of 1 entries			Records per	page 20	<ul> <li>K ← 1 → N</li> </ul>
0	Help Center						Cancel	Previous Deploy

You can click **Previous** to return to the previous tabs and edit or update the details.

9. The FactoryTalk Edge Manager will deploy to the edge node and provide a status update as FactoryTalk Analytics GuardianAl gets loaded and updates to a running status.

**NOTE:** The initial status will display as Invalid, this is normal while FactoryTalk Edge Manager initiates the deployment.

Edge Manager	FT Edge   GuardianAl non-prod	~
Ø Dashboard	< Back to Jobs / GAI-TN1_create_879e4d8a-9007-43d5-bd26-9b47916cd238	
🚑 Edge Nodes	Details	
Edge App Instances	Name Job Type GAI-TN1_create_879e4d8a-9007-43d5-bd26-9b47916cd238 Deploy Edge Apps	
Cluster Instances	Project Edge App DefaultEdgeGatewayProjectPolicy FT-GuardianAI.prerelease	
🖹 Library	0 Halted 0 Invalid 0 Initial 0 Downloaded 0 Verified 0 Installed 1 Running	)
Reports	Related Edge App In 🌴 Related Edge Node 🔰 Task Stat Current Edge App Instance Software Status	
🙋 Jobs	GAI-TN1     GuarianAI-TestNod_ Accepted Running     O	
₩ Marketplace		
Administration	Showing 1 to 1 of 1 entries Records per page $20$ $\checkmark$ $K \leftarrow 1 \rightarrow X$	
		_

10. The Edge App Instance also provides a status view of the FactoryTalk Analytics GuardianAl Application.

#### FT Edge Manager FT Edge | GuardianAl non-prod • 🕚 📵 Dashboard < Back to Edge App Instances / GAI-TN1 Status Basic Info Adapters Events Logs Storage 🚊 Edge Nodes Edge App Instances Information Admin Status Active Last Known Uptime 2 minute(s) Cluster Instances Run State Online Last Seen Feb 18, 2024 10:39 AM Last Booted Feb 18, 2024 10:36 AM 🖹 Library Opaque Status Not Available Reports Utilization | For Last 1 Hour 廷 Jobs ₩ Marketplace CPU Utilization Memory 🛑 CPU USAGE Administration 4.47 GB (100%) Percentage 0.51 GB (12%) 10:37 10:38 10:38 10:39 Total Memory 4.47 GB (100%)

#### NOTE: Look for the unique application name created in step 4.

# Accessing FactoryTalk Analytics GuardianAl

This section provides information on how to access FactoryTalk Analytics GuardianAl from FactoryTalk Edge Manager.

1. On a web browser, type the following URL in the following format to access the FactoryTalk Analytics GuardianAI application.

#### https://<Edge Device IP address>

• Edge Device IP address: Copy the address from the Edge Node Basic tab.

(	FT Edge" Manager	FT Edge   GuardianAl n	on-prod	
Ø	Dashboard 🔇	ld eff88c61-2813-4571-b733	3-79754d5b8f6c	
Î	Edge Nodes	Name -TestNode1		Title -TestNode1
Ð	Edge App Instances	Description Not Available		
23	Cluster Instances	Project DefaultEdgeGatewayProj	ectPolicy	
Ē	Library	Tags		Local Operator Console
<b>र</b> ।-	Reports	BuildType : prerelease	)	Not Configured
51	Jobs	Location 20147, Ashburn, US		Serial Number BAM0453000001
Å	Marketplace	Asset ID Not Available		Asset Location Meqoun
ණ	Administration	ldentity Type Generate Single-Use EVE	-OS Installer	
		Environment		
		Name	IP Address	DNS
		Ethernet Port 1	Not Available	Not Available
		Ethernet Port 2	10.91.22.159 fe80::cc4	48: 10.81.160.35, 10.81.160.36
		Ethernet Port 3	Not Available	Not Available
0	Help Center	Ethernet Port 4	Not Available	Not Available

2. The application login page is displayed. Provide the password.

**NOTE:** The password is set in the custom configuration step 6 of the Deploy FactoryTalk Analytics GuardianAI section.

O Mot secure https://10.91.22.159/#/Login?retumUrl=%2PHomeMonitoring	
	Analytics "GuardianAl"
	Log in to FactoryTalk Analytics GuardianAl
	Password
Rockwell Automation	Login
expanding <b>human possibility</b> '	

After login, the user will be prompted to select the time-zone for FactoryTalk Analytics GuardianAl. It is recommended to set the time zone to the locale of the compute surface where FactoryTalk Analytics GuardianAl is installed. The time zone is used by the application to record timestamps of deviation and failure risk events encountered when monitoring assets. The time zone can be modified by going to the general settings page via the gear icon in the upper right corner of the FactoryTalk Analytics GuardianAl application.

Analytics <sup>-</sup> GuardianAI <sup>-</sup>		\$\$ (i	) Logout
	GuardianAl		
	Select your time zone to get started:		
	Time Zone (UTC-08:00 : PST) Los Angeles, United Str		
	Get Started		

# **Manual Container Deployment**

This section provides information about deploying FactoryTalk Analytics GuardianAl manually using container.

# **Prerequisites**

- Minimum Hardware Specifications
  - Processor: Intel Atom 4 core
  - Ram: 8 GB
  - SSD: 120 GB
- Host Machine OS
  - Linux Debian 11, 12
- Client Computer
  - OS Windows
  - Web Client: Chrome or Edge
- Ensure the Linux instance has web access to enable the automated script to download dependent packages

# **Installation Files**

The following files are required to perform manual container deployment of FactoryTalk Analytics GuardianAl application.

- Build Label- V1.00.00
- guardianai-install.sh This installation script is used to deploy FactoryTalk Analytics GuardianAl application.
- guardianai-uninstall.sh This script is required in case you want to uninstall FactoryTalk Analytics GuardianAl application.
- guardianai-reset-password.sh Script used to reset the Login password for the FactoryTalk Analytics GuardianAI main login screen.
- guardianai.tar This file contains application files and all other dependent scripts required to run the FactoryTalk Analytics GuardianAl application.
- redis.tar This file contains the redis database used as the data storage layer by the FactoryTalk Analytics
   GuardianAl application.

# Installing FactoryTalk Analytics GuardianAl

Perform the following steps to install the FactoryTalk Analytics GuardianAl application.

- Ensure the user executing the installation has sudo permissions. For additional information please refer to the step below "Adding a user to the sudoers list."
- Move the content guardianai-install.sh, guardianai-uninstall.sh, guardianai.tar, and redis.tar files to the target Linux device.
  - Create a GuardianAl directory in your user home directory.

```
guardianaivm@guardianVM12:~*$ ls -l
total 36
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Desktop
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Documents
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Downloads
drwxr-xr-x 3 guardianaivm guardianaivm 4096 Feb 14 16:20 GuardianAI
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Music
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Music
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Pictures
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Pictures
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Public
drwxr-xr-x 2 guardianaivm guardianaivm 4096 Feb 8 10:02 Public
```

- Place the files in that directory
- Note: WinSCP can be used to transfer files to the Linux Instance
- 3. Modify the permission to the installation scripts to enable execution
  - chmod +x guardianai-install.sh
- 4. Execute the Installation script.
  - a. The installation script takes as an argument the login password that will be used for the application.
  - b. ./guardianai-install.sh <GuardianAl Login Password>
  - c. Note: The user will be prompted to enter the sudo password.
  - d. Once the script is executed successfully, the user will see the following:

#### Figure 3. Installation Script Execution

<pre>guardianaivm@guardianVM12:~/GuardianAI\$ ./guardianai-install_3.sh Rockwell</pre>
Starting the setup
Updating package lists
Installing archive extractor package
Extracting GuardianAI package
Extracting database package
Installing runtime environment
Setting port 80 access
Setting port 443 access
Setting connectivity check from containers
Enabling execution after this session disconnect
Enabling scheduling service
Stopping GuardianAI runtime
Removing GuardianAI runtime
GuardianAI database does not exist
GuardianAI does not exist
Loading GuardianAI
Loading GuardianAI database, previous data is retained
Creating GuardianAI runtime
Creating database
Creating GuardianAI with admin password
Running GuardianAI
Removing GuardianAI installation archive
Removing database installation archive

## Accessing FactoryTalk Analytics GuardianAI

FactoryTalk Analytics GuardianAl has a self-signed certificate, to access the application the user should bring up a web page using either Chrome or Edge.

FactoryTalk Analytics GuardianAl Hyperlink: https://<hostname>

NOTE: Enter hostname in the Linux shell command line to get the instance hostname for connection.

The first access point for FactoryTalk Analytics GuardianAl will be the login page. The login password is the argument set when first installing the application and running the shell script, please refer back to step 4.b of the installation. ./guardianai-install.sh <GuardianAl Login Password>

O To State State

Figure 4. FactoryTalk Analytics GuardianAl Login Page

After login, the user will be prompted to select the time-zone for FactoryTalk Analytics GuardianAl. It is recommended to set the time zone to the locale of the compute surface where FactoryTalk Analytics GuardianAl is installed. The time zone is used by the application to record timestamps of deviation and failure risk events encountered when monitoring assets. The time zone can be modified by going to the general settings page via the gear icon in the upper right corner of the FactoryTalk Analytics GuardianAl application.



# Uninstalling FactoryTalk Analytics GuardianAl

Perform the following steps to uninstall FactoryTalk Analytics GuardianAl.

- 1. Ensure the user executing the installation has sudo permissions. For additional information please refer to the "Adding a user to the sudoers list."
- Modify the permission to the uninstall scripts to enable execution. chmod +x guardianai-uninstall.sh
- 3. Execute the Uninstall script.

./guardianai-uninstall.sh

4. Once the script is executed successfully, the user will see the following.

```
Figure 6. Uninstall Script Execution

guardianaivm@guardianVM12:~/GuardianAI$ ./guardianai-uninstall.sh

Starting the uninstall...

Disabling GuardianAI scheduling service

Stopping GuardianAI runtime

Removing GuardianAI runtime

Removing installed GuardianAI database docker.io/guardianai/redis:7.2.4

Removing installed GuardianAI docker.io/library/guardianai:1.0.0-prerelease.17

Removing GuardianAI logs

Removing GuardianAI captured trends
```

**NOTE:** The uninstall script will delete all the data captured by FactoryTalk Analytics GuardianAl and fully remove the containerized application.

# **Resetting FactoryTalk Analytics GuardianAl Login Password**

In the event a user forgets the login password for the main FactoryTalk Analytics GuardianAl page, the following script can be used to reset the password. The login password will be reset to the original password configured upon installation of the application (refer to step 4 below to query the original password)

- 1. Modify the permission to the reset password script to enable execution.
  - chmod +x guardianai-reset-password.sh
- 2. Execute the reset password script.

./guardianai-reset-password.sh

 The script will reset the password to the original value set during the installation of FactoryTalk Analytics GuardianAl.

Figure 7. Password Reset

guardianaivm@guardianVM12:∼/GuardianAI\$ ./guardianai-reset-password.sh Deleting existing password The password has been reset to the value that was used during product install

4. To query the original password set during the installation, use the following command.

podman inspect guardianai|grep Admin\_Password=

- 5. Users will now be able to login using the original password set during installation
- To change the password, please go to the settings page via the gear icon in the upper-right corner of FactoryTalk Analytics GuardianAI.

## Adding a user to the sudoers list

#### Add user to the sudoer list

Perform the following steps to add a user to the sudoers list.

NOTE: A root user should add a user to the sudoers list. Before you add the user to the sudoers list,

perform the first two steps in the following procedure to switch to a root user.

- 1. Run command: su
- 2. Enter the root password
- 3. Run command: sudo visudo

The visudo command ensures that you do not make syntax errors that can lock you out of the system. GNU nano 5.4 /etc/sudoers.tmp

This file MUST be edited with the 'visudo' command as root.
Please consider adding local content in /etc/sudoers.d/ instead of directly modifying this file.
See the man page for details on how to write a sudoers file.
efaults env_reset efaults mail_badpass efaults secure_path="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:
Host alias specification
User alias specification
Cmnd alias specification
User privilege specification oot ALL=(ALL:ALL) ALL

- 4. Using the down arrow key, scroll down to the line below root ALL=(ALL:ALL) ALL
- 5. Add the following as shown in the image.

 <User name> ALL=(ALL) ALL
 User privilege specification root ALL=(ALL:ALL) ALL
 guardianaiuser ALL=(ALL) ALL

- 6. To exit: ctrl-x
- 7. Y enter to save



8. Enter again to write to sudoers.tmp

#### Switch back to the user by exiting from root

Run command: exit
 root@guardianaivm:/home/guardianaiuser# exit
 exit
 guardianaiuser@guardianaivm:~\$