



# **CORMANT-CS9**

#### New Features Training v9.2

April 2018



#### **Topics Covered**

- ✓ Introductions
- ✓ <u>Summary of Key Changes</u> (v9.2)
- Training on New Features
- Information & Other Training Resources
- ✓ <u>Online Help Feature</u>
- ✓ Stay in Touch
- <u>Cormant Customer Support</u>



#### Summary of Key Changes

- > Network Discovery has been added to CS Web
- > MIB Files testing and upload
- > Discovery Log tab has been added to monitor discovered devices
- > SNMP Query function added in CS Web



Training on New Features







#### Let's Get Started...



- > Network Discovery or ND is back!
- > This function allows you to discover devices within a range of network you have configured
  - > Discovers devices in the network with either ping (ICMP) or SNMP-enable protocol
- > There are a few configurations you will need to set up to use ND:
- 1. Set the **Discovery Attribute Mappings**. This will allow you to map discovery fields such as uptime, mac addresses, to specific attribute in CS
- 2. Configure IP Range. This is where you set the network range you'd like ND to discover

CORMANT-CS Q Quick Search			
Discovery Components	11-Eloor		
🖃 🌒 All Spaces			
🕀 🌘 Bonifacio Global City	Network Settings	IP Ranges	Discovery Log
🖃 🌒 Demo DB			
🖃 🌘 North America	+ Add 🕼 Edit	<b>X</b> Delete	
Canada	Name	Start IP	End IP
🕞 📰 U 🔩	Demo	127.0.0.1	127.0.0.1
😑 🧍 Atlanta DC Building	Interop SNMP	63 147 175 30	63 147 175 33
🖃 🛔 02-Floor		05.147.175.50	03.147.173.35
02-ATL-DC1	Cormant SLO ServerTech	24.180.11.115	24.180.11.117
🕀 💾 02-ATL-MDF	our of term		
🖃 🛔 11-Floor	Page 1 of 1	Rows 10	~ 1
🕀 💾 Computer Room			

\*Once these two items are configured, you can run ND.



#### **Discovery Attribute Mapping**

- First thing to do with regards to Network Discovery in Cormant-CS is to map the 3 mandatory discovery attributes. The 3 required attributes are:
  - > IP Address,
  - > MAC Address
  - > Last Update Date/Time.
- If coming from older version of Cormant-CS, you will need to map Last Update Date/Time attribute. In the main menu, go to Admin > Global Network Options > Discovery Attribute Mapping
- > Then follow below steps
  - 1. Open Cormant CS Client, click on **Configuration** then choose **Attributes.**
  - 2. Right-click on **Network** then choose **Add Attribute**.
  - 3. In the Name field, type-in **Last Update Date/Time**
  - 4. Date Type should be Alphanumeric. It can't be Date as Date does not allow Time.
  - **5. Length** minimum is 23. Save changes.



#### **Discovery Attribute Mapping**

> This is where you create/update required ND attribute/s

 Device Hostname	^	Details						
 DHCP								
 DNS Name		Group	Network					
 F1 - Connector		Name	Last Update Da	te/Time				
 F2 - Connector			-					
 Hostname		Description						
 iD Controller ID		Data Type	Alphanumeric				~	
 iD Panel Number	100			1.1				
 iD Unplanned Change		Length	23	÷				
 IP Address		Reference Data Link					$\sim$	
 IP Address F1								
 IP Address F2		Default Value						
 IP Address NIC 1		Units						
 IP Address NIC 2		Crinto						
 LAN Gateway IP			Required	Read Only	System De	fined		
 LAN Subnet Mask							<u>^</u>	
 Last Connected Time								
 Last Update Date/Time								
 Mac Address								
 Managed Equipment								
 Packets								
 Port Speed (Baud)								
 Rack Active Ports								
 Rack Active Ports Used								
 Rack Copper Ports								
 Rack Fibre Ports								
 Rack Passive Ports							~	
 Rack Passive Ports Used				Add Attribute	Save Changes	Delete Attribute	Cancel Cha	nges
 Rack Unused Porte		1						



#### **Discovery Attribute Mapping**

- Next, map the other mandatory discovery attributes. IP address is already mapped by default so no need map it. The other one is Mac Address discovery attribute mapped to Mac Address attribute.
- Follow below steps
  - 1. In the main menu, go to Admin > Global Network Options > Discovery Attribute Mapping
  - 2. Click on Mac Address, Select an Attribute pop-up will appear.
  - 3. In the search bar, type-in Mac and Mac Address will become available in the list.
  - 4. Tick the check box next to it to select it then click OK.
- Repeat same steps above to map Last Discovered Date/Time, map it to Last Update Date/Time.



#### **Configuration of IP Ranges**

- > After the 3 required attributes are mapped, set the IP range of items to be discovered.
- > In the Web main menu, go to Admin > Discovery Options
- If the warning below appears, click on Go to Migrate IP Range then proceed to Migrate IP Range page.



- > To configure IP Ranges:
  - 1. In the main menu, go to *Admin > Discovery Options > IP Ranges*
  - 2. Go to and highlight the Space where you want to add IP Ranges.
  - 3. Click **ADD**
  - 4. Fill the Name, Start IP, End IP, and the SNMP Community Strings.
  - 5. Click OK to save changes. Global Network Options

1	Femplate/OID Mapping MIB Files Discovery Attribute Mapping Migrate IP Ranges		
٩	Link 🗙 Delete IP Range and Related Snmp Info		
	Name	Start IP	End IP
	Demo	127.0.0.1	127.0.0.1
	Interop SNMP	63.147.175.30	63.147.175.33
	Cormant SLO ServerTech	24.180.11.115	24.180.11.117
P	age 1 of 1	Rows 10 T	



#### **Migration of IP Ranges**

You may migrate your pre-defined IP Ranges here. Cormant-CS will ask you to complete this process when it detects that you have configured IP ranges from your previous Cormant CS version.

O Migrate all orphaned IP Ranges before enabling discovery Go To Migrate IP Range

- > To migrate pre-defined IP ranges, simply click on the Go To Migrate IP Range button or in the main menu go to Admin > Global Network Options > Migrate IP Ranges then follow below steps.
  - 1. Check the IP ranges that you wish to migrate.
  - 2. Once checked, click on the Link button.
  - 3. Highlight the Space where you want to migrate the selected IP Range(s) then hit OK.
  - 4. Repeat above steps if you have remaining IP Ranges.

G	Global Network Options								
٦	emplate/OID Mapping MIB Files Discovery Attribute Mapping	Migrate IP Ranges							
٩	Link X Delete IP Range and Related Snmp Info								
	Name		Start IP	End IP					
	Demo		127.0.0.1	127.0.0.1					
	Interop SNMP	63.147.175.30	63.147.175.33						
	Cormant SLO ServerTech		24.180.11.115	24.180.11.117					
P	age 1 of 1		Rows 10 T						



#### **Discovering Devices via SNMP or ICMP**

- > You are now ready to discover via either ICMP or SNMP
- > In the main menu, go to Admin > Discovery Options
  - 1. Browse **Discovery Components** in the left pane and highlight the component you wish to discover devices from.
  - 2. Click **Edit** button.

Discovery Components	02.4TL.DC1			
🖃 🌒 All Spaces	OZ ATE DET			
🕀 🌒 Asia/Pacific	Network Settings IP Range	es Discovery Log		
CMDB				
🕀 🌒 Europe	🕼 Edit 🖺 Save 🗙 Cancel	🗈 Run		
🖃 🌒 North America	Discovery Options			
Canada	Allow ICMP queries	Off	Allow SNMP queries	Off
🖃 🗮 USA	Auto Discovery	Off	Auto update linked components	Off
🖃 🧍 Atlanta DC Building	Discovery interval (min)	0	Query Timeout (ms)	0
🖃 🛔 02-Floor				
📴 02-ATL-DC1				
🕀 💾 02-ATL-MDF				
🕀 🛔 11-Floor				

- 3. Switch both Allow ICMP queries and Allow SNMP queries to On
- 4. Type in Discovery Interval and the Query timeout.
  - ✓ To automatically discover devices, switch **On** Auto Discovery.
  - ✓ To manually start discovering devices click the **Run** button.



#### **Discovering Devices via SNMP**

- > To check the status of discovery, click on **Discovery Log** tab. The status can be determined via **Action Type** column which will tell if the process is **START** or **FINISH**.
- > When the status is Finish, click the Space name on the Discovery table to automatically direct you to the component on the asset tree. It will also automatically open the discovery tab to show discovered devices
- > Click on the Discovery tab, this is where you will see the discovered devices.

<ul> <li>All Spaces</li> <li>Asia/Pacific</li> </ul>	02-ATI	L-DC1								Aeturn to Bookmarks
<ul> <li>CMDB</li> <li>Europe</li> </ul>	Details	Subcomponents Cor	nnections H	istory Plar	View Rack	View Ale	rts <u>Discovery</u>			
🖯 🌖 North America	🗆 Filter Op	tions					Ľ			
<b>I</b> ←I Canada	Status	All		DNS	Filter DNS Nam	2		Last		to
🖃 💻 USA	IP	Filter IP		Name	Filter MAC			Discovered Date/Time		
🖃 🛔 Atlanta DC Build	Address			Address	FILTER MAC			Ignored	🕫 Hidden	
E 🛔 02-Floor								Devices		<u></u>
🕀 📑 02-ATL-D									Apply filter Cle	ar filter
🕀 🚼 02-ATL-M	<b>%</b> Link		2 Refresh							
🕀 📐 02-ATL-Po	Status	Last Discovered Date/Time	Linked Device	Linked Port	MAC Address	IP Address	SNMP System Name	DNS Name	OID Templates	SNMP System Description
🕀 🔳 02-ATL-St				No	Discovere	d Device	s Found			
🕀 🧍 11-Floor				110	2.5000010	a Device	o i o unu			
	Page 1	of 1			Rows	10 🔻				1



#### **Adding Discovered Equipment**

- > To add discovered equipment to CS components, go to Discovery Log of the space where you run or configured Auto Discovery. In below example is 2<sup>nd</sup> floor of Atlanta DC Building
  - 1. In the main menu, go to Admin > Discovery Options then go to the corresponding space.
  - 2. Under the **Space** column, click on the space link. (**02-Floor** in this example)

Discovery Components	02-Eloor						
😑 🌒 All Spaces	02-11001						
🕀 🌒 Asia/Pacific	Network Sett	ings IP Ranges	Discover	<u>y Log</u>			
CMDB							
🕀 🌒 Europe	E Filter Option	15					
😑 🌖 North America	Log Level	All Levels		•	Device		
I+I Canada	Action	All Actions		v	MAC/IP	Filter MAC o	r IP
🖃 📕 USA	Туре				Address		
🖃 🧍 Atlanta DC Bui	Entity Type	All Entities		Ÿ	OID	Filter OID	
🖃 🛔 02-Floor	Date Range			to		Apply filter	Clear filter
📴 02-ATL	Refresh Eve	ry Minute(s)	• • S	how Older Logs			
🕀 🚹 02-ATL	Space Log Le	vel Action Type	Entity Type	Message	Log Time 🗸	IP Address	MAC Address C
<ul> <li></li></ul>	02-Floor Info	Finish	Setting	Finished Queries With Ranges 192.168.7.1 - 192.168.7.100	21/02/2018 02:09:03		
	02-Floor Info	Create	Device	Created New Device: 192.168.7.2	21/02/2018 02:09:03	192.168.7.2	90:2B:34:38:DB:42
	02-Floor Info	Create	Device	Created New Device: 192.168.7.8	21/02/2018 02:09:03	192.168.7.8	00:15:5D:07:07:00
	02-Eloor Info	Finish	Setting	Finished Scan With Ranges 192 168 7 1 -	21/02/2018		



#### **Adding Discovered Equipment continued...**

3. Here you can see the discovered devices in this space, tick the checkbox of the device you want to



4. Another page will pop-up containing the details of discovered equipment. You can also link a component even there is no matched component/port in asset tree. You can either manually link it by selecting a port, or you can create a new component and link it to the port of the created component





#### **Global Network Settings**

 Another feature in ND is the ability to upload MIB files. This is done under Global Network Options from Admin module
 Global Network Options



- Click on the **MIB Files** tab and you can either **Add**, **Delete** and even **Test MIB** files before uploading.
- CS performs dependency checks when adding and deleting MIBs as some MIB files have pre-requisite MIBs to properly work



#### **Space-based ND Settings**

> You can configure CS' Network Discovery behavior per Space and/or Data Center

- 1. Under Admin Module > Network Settings, you can set the following
- 2. Enable/Disable SNMP Queries and ICMP
- 3. Allow Automatic Discovery meaning you won't need to execute or click Run discovery. Note that this is taxing to network resource so, once you have discovered all items, it is recommended that this is turned off
- 4. And toggle SNMP queries
- 5. You can also set the interval of Network Discovery and I suggest minimum of 10minutes. And the Query Time out settings should be set between 1000 ms to 2000ms





MIB Files Discovery Attribute

Template/OID Mapping

## Network Discovery in v9.2

#### **Network Discovery Settings Summary**

 So just a recap, Global Network Settings is where you manage MIB files and set Discovery Attribute Mapping
 Global Network Options

. 🔟 Dashboard 🔒 Assets 🖹 Reports 🖋 Workflow 🌲 Alerts	🕫 Admin 🔻	Add Delete Test MIBs
Global Network Options	User Management	Name
	Zones	acl.mib
Template/OID Mapping MIB Files Discovery Attribute Mapping	Tools & Global Options	bandWidth.mib
Add Delete Test MIBs	Global Network Options Reporting	bridgeManage.mib
Name	Network Discovery	✓ configSave.mib
acl.mib	Discovery Options	dhcpFiltering.mib
bandWidth.mib		

While local or space based settings are set in Admin Module > Discovery Options. This is where you
put the IP Range and enable SNMP Queries





#### **Query Device function**

- Another feature addition is the ability to SNMP Query a specific device. This allows you to navigate the SNMP MIB structure of an equipment in CS. Below are the simple steps in how to do this
  - 1. Open CS Web, go to the equipment where you want to query a device

B Asset Tree	Assets / No	orth America / USA / Atlanta DC Building	g / 02-Floor							
All Spaces										_
🕀 🌒 Asia/Pacific	02-Floo	or								
CMD8	0.000					0				
🕀 🌒 Europe	Details	subcomponents Connection	s History P	NET VIEW KADK	New ARTS	Discovery				
😑 🕒 North America	E Filter Opt	tions								
I-I Canada	Status	Al		* DNS	Filter DNS Name.			Last		
🖃 🗮 USA	P	Filter P.,		Name				Discovered Date/Time		- 1
😑 🛔 Atlanta DC Building	Address			Address	Filter MAC			Ignored	@ Hidden	
🖃 📓 02-Floor								Devices	_	
① 2-ATL-DC1     ③     ④     ③									Apply filter Cie	ar filter
🕀 🎽 02-ATL-MDF	S Link	P Ignore @ Query Device Chafres	h							_
① 2-ATL-Power     ③	C Status	Last Discovered Date/Time	Linked Device	Linked Fort	MAC Address	IP Address	SNMP System Name	DNS Name	OID Templates	SNMP
O2-ATL-Storage     O2-ATL-Storage     O2-ATL-Storage     O2-O2-O2-O2-O2-O2-O2-O2-O2-O2-O2-O2-O2-O	New	21/02/2018 03:08:43			90 28 34 38 08 42	192.168.7.2		mniserver		
🗉 🔜 Manila AD	-									
🕀 🛔 11-Floor	U Neu	21/02/2018 03:14:44			00.15.50.07.07.00	192.108.7.8		mn-ed		_
	New	21/02/2018 02:44:43			08.00.27:81:10.82	192.168.7.88		WIN- DQEEDMJFB57		
	E New	21/02/2018 03:14:44			08.00.27:38.95:02	192.168.7.89		vms-mbb-svrő		
	Page 1	of 1			Ra	ws 10 *				

- 2. Tick the check box next to the device then click on **Query Device button**.
- 3. Select a node in the tree in the left pane then click on **Query** button.

Query Device		×
🖃 🖻 internet	Device Name	
directory	IP Address 192.168.7.8	
experimental	Hostname mnl-ad	
🖃 🖹 mgmt	SNMP Configuration	
🖃 🖹 private	Details Description	
\pm 🖹 enterprises		
🖹 security		
⊟ snmpV2		
🕀 🖹 snmpDomains		
🕀 🖹 snmpModules		
🕀 🖹 snmpProxys		



#### Information & Other Training Resources

> All Release Notes can be found in the release package on the <u>Cormant website</u>, using your secure user login credentials on the the Customer Portal.





### Online Help

- > Our Help System has migrated to Cormant CS-Web, our web based platform (though also still available on Cormant CS-Client).
- > To access the Online Help feature:
  - > In the Web, click on your UserName in the Top Right Corner
  - > From the dropdown menu, click Help



> You will be welcomed to the Cormant Help Feature in a new tab!

#### CORMANT

### Online Help

> Online Help is divided into 5 major sections

- > What's New in Cormant CS-9?
- > Using the Web
- > Using the Handheld
- > Using the Desktop
- > Installation & Troubleshooting
- > You may expand any section by clicking on the associated icon



The Search feature in the upper right hand corner will allow for key word searching and quickly finding the information you need.



#### Stay in Touch

To access the *Private* Cormant-CS user group: <u>https://www.linkedin.com/groups/4323060</u> or email <u>sales@Cormant.biz</u> to join.





#### For Additional Help

If you would like additional help with any aspect of Cormant-CS, contact your partner or Cormant directly at <u>support@Cormant.biz</u>



#### **Cormant Customer Support**

- > USA/World Wide: +1 805 747 4178
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- > Italy: +39 02360 48279
- > Netherlands: +31 (0)20 220 9036
- > Poland: +48 (0)2 2206 2153
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