

# Data Models Feature Document



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# 1 Introduction

In this document, we'll see the data models, (Admin > Data Models), their behavior and how we can use them. Working with these data models need some level of network knowledge and understanding of OIDs.

By default Motadata has stored the data models of majorly available devices in the market. This means that configuration of generic counters like RTT, status, packet loss etc. are already available in the system. The data model section is useful when you are using any device and Motadata doesn't have default configuration for it.

### 1.1 What is Data Model?

Any network or SNMP device requires a model consisting of the system OID, vendor and device type. Motadata uses this data model and the OID's of the counters associated with it to fetch information from the device.

Using the system OID, Motadata understands which monitor it is. When the monitor is identified, Motadata uses OID of counters to fetch specific information of metrics. The metric information than can be seen in monitor's detail page and in widgets.

### 1.2 Types of Data Models

In Motadata, we have divided OID in two broad segments:

- Scalar Metrics: Returns single metric value only. E.g. CPU (%), Memory, Disk etc.
- Tabular Metrics: Returns multiple metric values. E.g. Fan speed etc.

#### 1.3 How Motadata Uses Data Models?

Motadata uses the system OID, vendor name and device type to create 'Device Signature'. For each device type of one vendor, there can be only one device signature profile. In this profile, add all the counter IDs you want to monitor.

Let's understand through an example. A Fortinet firewall has a set of OIDs for different counters. You can see the list of OID from <u>here</u>. For CPU usage, the OID is: 1.3.6.1.4.1.12356.101.13.2.1.1.3. Enter this OID with SNMP walk command in Motadata backend.

#### snmpwalk -v2c -c mind 172.16.10.1 1.3.6.1.4.1.12356.101.13.2.1.1.3

The output of command is:

The output is an 'Integer' with value: 4. This example gives us following observations:

- Motadata can do SNMP walk in your system. That means all configurations are correct and Motadata is functioning properly.
- We have correct community and credentials to do SNMP walk.



- Motadata can discover the IP 172.16.10.1 and it is network/SNMP device.
- The OID is returning the value and its type. Means we can configure device signature in Motadata GUI.
- The OID returned only 1 value. This is a scalar OID.

\*\*Note: We shall use the same process of SNMP walk before adding each OID for device counter.

#### 1.4 Default Signatures

Motadata comes with a lot of data models already configured in the system. Ideally, your device signature should be present in the system. To check if your device signature is present or not, you should know system OID of the device. When known, do following:

- Go to Admin > Data Models
- In SNMP Device Signatures tab, search for the system OID.

SNMP Device Signatures	Metric Data Models		
Q .1.3.6.1.4.1.12532.25	4.4.1		]
Showing 36 SNMP Device Sig	natures		
.1.3.6.1.4.1.12532.254.4.1	Neot	eris 📟 SNMI	P Device 0

• If your device signature is available, look for all the counter OIDs on the right hand side. If the OID is not available, you can edit the signature and add them.

.1.3.6.1.4.1.12532.254.4.1		D 🗎
.1.3.6.1.4.1.12532.254.4.1	Neoteris	SNMP Device
OID	Counter Name	Data Type
.1.3.6.1.4.1.12532.11.0	Pulse Secure VPN Memory (%)	Numeric 🗸 🕂 💼
.1.3.6.1.4.1.12532.24.0	Pulse Secure VPN Swap Memory (%)	Numeric - +
.1.3.6.1.4.1.12532.10.0	Pulse Secure VPN CPU (%)	Numeric V +
.1.3.6.1.4.1.12532.25.0	Pulse Secure VPN Disk (%)	Numeric V +
.1.3.6.1.4.1.12532.42.0	Pulse Secure VPN Temperature (Celsius)	Numeric V +
.1.3.6.1.4.1.12532.2.0	Pulse Secure VPN Active Web Users	Numeric Y +



### 1.5 Default Data Models

Based on the signature OID present, Motadata automatically creates the metric data models (see second tab).

SNMP Device Signatures Metric Data Models			
Q firewall			Create -
Showing 330 Metric Data Models			
Firewall Metrics	SSH Script Metrics		N 🖹 🕯
Juniper Firewall Metrics	Model Name	Source Type	
Juniper Firewall Interface Metrics	SSH Script Metrics	SSH Script 🔕	
Cisco Firewall Metrics			
Firewall Interface Metrics	Counter Name	Data Type	
Cisco Firewall Interface Metrics	RTT (ms)	Numeric ~	
Firewall User Index Metrics	Script Output	String	
	+ Add 5 more rows		

Even when you create a new device signature, Motadata automatically adds the data model for it. Again, these data models serve 90% of most people's requirements. In case if they need something specific, they can create composite data models or use queries for it.

### 1.6 User Defined Models

In Motadata you can also create your own device signatures and data models. To create a device signature you need system OID of the device. Along with it, you should know following things:

- System OID of device
- Vendor of the device
- Device type of the device
- Scalar metric OIDs (if required)
- Tabular metric OIDs (if required)

When you'll create a device signature, system will automatically create the data models for it. It will also group the data models using the signature name.

To create specific data models, you can also create composite data model or run it via writing a query.



# 2 <u>Creating a Device Signature</u>

While we are creating a custom data model, we assume that following requirements are satisfied.

• You know the system OID and metric OIDs you need to monitor. If you don't know the system OID, you can get the system OID from monitor's detail page.

<b>6</b> 172.16.1	0.1			
IP/Host: 172.16.1	10.1 / 172.16.10.1		RPE: Master RPE	
Tags : All Tags	Firewall			
Overview In	iterface			
Device Details		0 🗘	Availability	
Monitor	172.16.10.1			
Туре	ke Firewall			
System OID	1.3.6.1.4.1.12356.101.1.1041			
System	FG100E_MotaData.mindarray.com			
Network Latency			0 🌣	Systen
RTT (ms) Oms				

• The device is not already present in the system. In this case, you may directly jump to section 2.1 and 2.2.

Steps:

1. Go to Amin > Data models.



		_		_	
	Ŷ	<b>&amp;</b>	9	Ð	ľ
uct License	Utilities	Motadata Apps	Data Models	Restore Motadata	Custom Monitor Fields
മം		L			

2. On data models page, to be sure, let's first search the system OID is not already present in the system. Search the OID in the search box. In case if it is there, jump to section 2.1 and 2.2.

SNMP Device Signatures Metric Data Models							
Q .1.3.6.1.4.1.12356.10	)1.1.1041						
Showing 25 SNMP Device Signatures							

3. When the device signature is not present, click on 'Create' button to add a new device signature.



4. On 'Create Device Signature' page, add the system OID, vendor name and device type.

Create Device Signature		×
Device Signature OID 1.3.6.1.4.1.12356.101.1.1041	Vendor Name Fortinet	Device Type Firewall

5. Add at least one scalar metric to the signature. Before entering the OID, do an SNMP walk in the backend.

SNMP Walk Command: snmpwalk -v2c -c mind 172.16.10.1 1.3.6.1.4.1.12356.101.13.2.1.1.3





In our example, we'll add 2 scalar metrics.

- a. OID: Type the OID of the scalar metric.
- b. Counter Name: Type the name of the counter to recognize the OID.
- c. Data Type: Select the data type that OID is going to return.

\*\*Note: For a scalar metric, you have to add .0 at the end of the OID. Since, our scalar OID is 1.3.6.1.4.1.12356.101.13.2.1.1.3, we'll add counter as: 1.3.6.1.4.1.12356.101.13.2.1.1.3.0

Create Device Signature		
Device Signature OID	Vendor Name	Device Type
	ronnes	1 1001100
q	Counter Name	Data Type
356.101.4.1.3.0	CPU(%)	Numeric 🗸 🕂 🍅
	Memory(%)	Numeric 🗸 🕂 💼
\$6.101.4.1.4.0		String 🗸 🕂 💼
		'

6. Click 'Save'.

### 2.1 Adding Scalar Model

We learned that scalar metric returns only single value in SNMP walk. Also, we learned that to add scalar OID, we have to add .0 at the end of the OID. You can add scalar metric while creating a new device signature or to an existing signature.

1. Edit the device signature to add scalar metrics.

SNMP Device Signatures Metric Dat	a Models						
Q fortin							+ Create
Showing 26 SNMP Device Signatures							
.1.3.6.1.4.1.12356.101.1.1041	Fortinet	😽 Firewall	0	.1.3.6.1.4.1.12356.101.1.1041			<b>12</b> <sup>8</sup> •
				.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall	~
				OID	Counter Name	Data Type	
				.3.6.1.4.1.12356.101.4.1.3.0	CPU(%)	Numeric ~	<b>+</b>
				.1.3.6.1.4.1.12356.101.4.1.4.0	Memory(%)	Numeric ~	+
				+ Add 5 more rows 2			

2. Click on 'Add 5 more rows' (see above picture).

Before adding a new OID, perform the SNMP walk in the system. From the SNMP walk, you'll understand the data type for 3<sup>rd</sup> column.

3 iso.3.6.1.4.1.12356.101.13.2.1.1.3.1 = Gauge 32: 4 🛹 data type - integer	root@ubuntu:~# snmpwal	k -v2c -c mind	172.16.10.1 1	.3.6.1.4.1.12356.101.13.2.1.1.
150.3.6.1.4.1.12356.101.13.2.1.1.3.1 = Gauge32: 4 🛹 data type - integer	3			
	iso.3.6.1.4.1.12356.10	1.13.2.1.1.3.1	= Gauge32: 4	🛹 data type - integer

3. Type the OID. At the end of the OID, add a .0 at the end.



.1.3.6.1.4.1.12356.101.1.1041		ð	P 🖪 🛍
.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall	~
OID	Counter Name	Data Type	
361.101.4.1.3.0	CPU(%)	Numeric v 🕇 🍙	
.1.3.6.1.4	Memory(%)	Numeric 🗸 🕂 🍙	
+ Add 5 more rows			

4. Delete unwanted rows and click Save.

.1.3.6.1.4.1.12356.101.1.1041			ø 🖹 🕯
.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall	~
OID	Counter Name	Data Type	
.3.6.1.4.1.12356.101.4.1.3.0	CPU(%)	Numeric v +	
.1.3.6.1.4.1.12356.101.4.1.4.0	Memory(%)	Numeric v +	
.1.3.6.1.4.1.12356.101.4.1.6.0	Disk(%)	Numeric v +	
+ Add 5 more rows			_

### 2.2 Adding Tabular Model

Adding a tabular model is very similar to adding a scalar model. The only difference here is that the SNMP walk returns multiple values.

For our example, we used 'user index' counters OID and ran an SNMP walk.

snmpwalk -v2c -c mind 172.16.10.1 1.3.6.1.4.1.12356.101.5.2.2.1.1.1





You can add tabular metric while creating a new device signature or to an existing signature.

1. Edit the device signature to add scalar metrics.

SNMP Device Signatures Metric Data Models						
Q fortin (+ Create)						
Showing 26 SNMP Device Signatures						
.1.3.6.1.4.1.12356.101.1.1041 Fortine	t <b>é</b> ⊨ Firewall 0	.1.3.6.1.4.1.12356.101.1.1041				
		.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall		
		OID	Counter Name	Data Type		
		.3.6.1.4.1.12356.101.4.1.3.0	CPU(%)	Numeric 🗸 🕂 📋		
		.1.3.6.1.4.1.12356.101.4.1.4.0	Memory(%)	Numeric 🗸 🛨 💼		
		+ Add 5 more rows				

2. Click on 'Add 5 more rows' (see above picture).

Before adding a new OID, perform the SNMP walk in the system. From the SNMP walk, you'll understand the data type for 3<sup>rd</sup> column.



3. Add the OID, its counter name and the data type. Use the most unique OID from the list.

\*\*Note: Type OID as it is. Don't add anything at the end.

4. Click on the + sign.

.1.3.6.1.4.1.12356.101.1.1041		De 19 10 10 10 10 10 10 10 10 10 10 10 10 10
.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall
OID	Counter Name	Data Type
.3.6.1.4.1.12356.101.4.1.3.0	CPU(%)	Numeric V +
.1.3.6.1.4.1.12356.101.4.1.4.0	Memory(%)	Numeric - +
.1.3.6.1.4.1.12356.101.4.1.6.0	Disk(%)	Numeric - +
		String V 🕂 💼
		String V
+ Add 5 more rows		

#### 5. Add other OIDs below the unique ID. The boxes are identified using blue color.

.1.3.6.1.4.1.12356.101.1.1041		e 🖪 🗎
.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall
OID	Counter Name	Data Type
.3.6.1.4.1.12356.101.4.1.3.0	CPU(%)	Numeric - + 💼
.1.3.6.1.4.1.12356.101.4.1.4.0	Memory(%)	Numeric - + 💼
.1.3.6.1.4.1.12356.101.4.1.6.0	Disk(%)	Numeric - + 💼
1.3.6.1.4.1.12356.101.5.2.2.1.1.1	User Index	String - +
1.3.6.1.4.1.12356.101.5.2.2.1.1.2	User Name	String 🗸 🍙
1.3.6.1.4.1.12356.101.5.2.2.1.1.4	User Stat	String v
+ Add 5 more rows		

6. Delete unwanted rows and click Save.



.1.3.6.1.4.1.12356.101.1.1041				ø 🖪 🕯
.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall		~
OID	Counter Name	Data Type		
.3.6.1.4.1.12356.101.4.1.3.0	CPU(%)	Numeric	· +	1
.1.3.6.1.4.1.12356.101.4.1.4.0	Memory(%)	Numeric	· +	<b></b>
.1.3.6.1.4.1.12356.101.4.1.6.0	Disk(%)	Numeric	· +	<b>@</b>
+ Add 5 more rows				



# 3 Verifying Device Signature

### 3.1 Signature OID

You can look for the signature OID by searching the signature in data models section. In the search you can type the OID, vendor name or device type to find the signature.

- 1. Go to Admin > Data models.
- 2. In SNMP Device Signatures tab, search your signature.
- 3. Click on the signature. On right hand side you'll see the data model you created.

SNMP Device Signatures Metric Data Mod	dels					
Q fortine						+ Create
Showing 26 SNMP Device Signatures						
.1.3.6.1.4.1.12356.101.1.1041	Fortinet 6	Firewall 0	.1.3.6.1.4.1.12356.101.1.1041		3	P 🖹 🗊
			.1.3.6.1.4.1.12356.101.1.1041	Fortinet	Firewall	~
			OID	Counter Name	Data Type	
			.3.6.1.4.1.12356.101.4.1.3.0	CPU(%)	Numeric 🗸 🕂	
			.1.3.6.1.4.1.12356.101.4.1.4.0	Memory(%)	Numeric - +	
			.1.3.6.1.4.1.12356.101.4.1.6.0	Disk(%)	Numeric - +	
			1.3.6.1.4.1.12356.101.5.2.2.1.1.1	User Index	String -	
			1.3.6.1.4.1.12356.101.5.2.2.1.1.2	User Name	String ~	
			1.3.6.1.4.1.12356.101.5.2.2.1.1.4	User Stat	String ~	
			+ Add 5 more rows			

### 3.2 Data Models

The metric data models are automatically placed by the system under appropriate section. In our example of Fortinet firewall, the metrics were placed in two places under 'Metric Data Models' tab.

1. Firewall Metrics - This is a default category. The singular metrics are added in this category.



SNMP Device Signatures Metric Data Models			
Q firew			Create -
Showing 193 Metric Data Models			
Firewall Metrics	Firewall Metrics		/ 🖪 û
Firewall Interface Metrics	Model Name	Source Type	
Firewall User Index Metrics	Firewall Metrics	Firewall 🔕	
	Counter Name	Data Type	
	RTT (ms)	Numeric ~	1
	CPU(%)	Numeric 🗸 🗎	
	System Location	String	J
	64 Bit Counter	String	
	Uptime	String	
	System Description	String	
	(Memory (%)	Numeric	<b>1</b>
	Memory(%)	Numeric 🗸	
	System Name	String	-

2. For tabular metric, system created a new category. This category is named on the unique counter name we used. We used the name 'User Index'. Hence, system created the data model with the name: Firewall User Index Metric. Here, 'firewall' is the device type. 'User Metric' is the counter name and 'Metric' is the suffix.

SNMP Device Signatures Metric Data Mo			
Q frew 2			Create 🗸
Showing 193 Metric Data Models			
Firewall Metrics	Firewall User Index Metrics		1 🖹
Firewall Interface Metrics	Model Name	Source Type	
Firewall User Index Metrics	Firewall User Index Metrics	Firewall 🔕	
-			
	Counter Name	Data Type	
	User Stat	String 🗸 🗎	
	User Name	String 🗸 📋	
	User Index	String 🗸	
	+ Add 5 more rows		

\*\*Note: You can make changes in counter metrics from this page also.

#### 3.3 Monitor Widgets

To look at the counter metrics in monitor widget, the device should be provisioned in Motadata. In the system, create a widget with counter metrics that you created.

In below figure, we are creating a widget for firewall instance counter (tabular) metric. In the source type, you'll see the data model name 'Firewall User Index Metrics'. This name is visible because we created a device signature. The metric counters are visible in Analytics section. The output shows the data similar to the SNMP walk.



W	/idget Name			
	Firewall Instance Metrics	O Time Range Live		
0	- T Filter			•
	Source Type	Filter	Filter Values	Instance Filter
	Firewall Oser Index Metrics	Monitor		instance
2	Rule			•
	User Name 🗸	Value		0
	User Stat 🗸	Value		•
4	Visualization			•
	Group	View Type		
	Monitor 3	List v		
				Update Preview

#### Creating a metric for device signature

Firewall Instance Metrics				0 \$
۹				10 🔻
Monitor	🗘 Туре	🗘 User Index	🗘 User Name	♦ User Stat
172.16.10.1	le Firewall	1	Nihal.singh	2
172.16.10.1	le Firewall	10	guest	2
172.16.10.1	le Firewall	11	jubin.thomas	2
172.16.10.1	le Firewall	12	keyur.ranpura	2
172.16.10.1	😽 Firewall	13	nilesh	2
172.16.10.1	😽 Firewall	14	nisha.gohel	2
172.16.10.1	😽 Firewall	15	paramdeep .ramola	2
172.16.10.1	🔶 Firewall	16	qa	1
172.16.10.1	le Firewall	17	qa1	1

#### Output of the metric

root@ubuntu:~# snmpwalk -v2c -c mind 172.16.10.1 1.3.6.1.4.1.12356.101.5.2.2.1.1.2
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.1 = STRING: "Nihal.singh"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.2 = STRING: "Rahul.singh"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.3 = STRING: "account1"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.4 = STRING: "account2"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.5 = STRING: "ankit.sanghavi"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.6 = STRING: "chetan.vadukar"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.7 = STRING: "devendra.khatana"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.8 = STRING: "gaurav.patel"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.9 = STRING: "gk"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.10 = STRING: "guest"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.11 = STRING: "jubin.thomas"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.12 = STRING: "keyur.ranpura"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.13 = STRING: "nilesh"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.14 = STRING: "nisha.gohel"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.15 = STRING: "paramdeep .ramola"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.16 = STRING: "qa"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.17 = STRING: "qal"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.18 = STRING: "raj.pandya"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.19 = STRING: "red"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.20 = STRING: "shrivan.hirakani"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.21 = STRING: "sunil.kumar"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.22 = STRING: "uday.hathaliya"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.23 = STRING: "vaarisha.gogdani"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.24 = STRING: "vishal.vankar"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.25 = STRING: "vpn"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.26 = STRING: "vpn.guest"
iso.3.6.1.4.1.12356.101.5.2.2.1.1.2.27 = STRING: "vpn.test"
root@ubuntu:~#

SNMP walk output for comparison



# 4 Create New Data Model

You'll need to create a new data model only in following cases:

- You have SSH, PowerShell or Database Server provisioned in Motadata and you want to see the output of a specific query.
- You want to create a composite data model to compare the different metrics of the system.

### 4.1 Custom Data Model

#### \*\* Requires knowledge of writing a query.

To execute your custom query in PowerShell, Database server or SSH server; you can create a custom data model. While creating a custom data model, you need to make sure following things:

- Your query is producing desired results when we run it in backend.
- While adding the Database/PowerShell/SSH server in Motadata, you have added the script.

To create a custom data model:

- 1. Go to Admin > Data Models.
- 2. In the 'Metric Data Models' tab (second tab), click on Create >> Custom.

SNMP Device Signatures Metric Data Models		
Q Search Showing 332 Metric Data Models		Create - Clustorn Composite
SSH Script Metrics	SSH Script Metrics	e 🖪 🗎
Tomcat JDBC Pool Metrics	Model Name	Source Type
Solaris Metrics	SSH Script Metrics	SSH Script 🔘
IIS Service Metrics		
Windows WMI Disk I/O Metrics	Counter Name	Data Type
Active Directory Log File Metrics	RTT (ms)	Numeric
Hyper-V Virtual Storage Device Metrics	Script Output	String
Amazon Redis Cache Security Group Metrics	+ Add 5 more rows	
Windows WMI Metrics		
Oracle Blocking Session Metrics		

3. A page 'Create Metric Data Model' will open up. In this page, provide the name of the counters that will appear as the output of the query. For safe side, first run the query in the backend and then copy the output column names over here.



Counter Name	Data Type	
	String ~	+
	String	+
	String ~	+ 🗎
	String	+
	String	<b>+ •</b>
+ Add 5 more rows		

#### **Fields Description**

Model Name. Type the name of the model.

*Source Type*: Select the type of the query for which you are building the model. You can choose from 3 types of queries: Database query, PowerShell and SSH.

*Counter Name*: Type the name of the output counters (from the query) and their datatypes.

For this to work, you have to follow following rules:

- You **must** enter the counter name exactly as the output of your query. System compares the counter name here and in the query for mapping.
- The counters are categorized as parent and child counters. By default, you only see parent counters.
- In the parent counter, enter only those column names that contains unique value.
- Add child counters by clicking on '+' button in parent counter row. Input rest of the columns over here.

Create Metric Data Model	×
Model Name Database Query Builder	Source Type Database Query
Counter Name	Data Type
Parent Counter (accepts unique value)	String v + a
Child Counters (accepts other values)	String V
	String v 😝
	Save

• If you have used multiple queries and there are multiple outputs, then only use second parent counter.

### 4.2 Composite Data Model

In widgets you can select only one source type. What if you want to a composite widget with different source types? For such scenario, we can create a composite data model. In composite data models, you can see information from multiple source types. It is used when you want to see say: CPU consumption of Linux and Windows servers.



To create a composite data model:

- 1. Go to Admin > Data Models.
- 2. In the 'Metric Data Models' tab (second tab), click on Create >> Composite.

SNIMP Device Signatures Metric Data Models		
Search Showing 332 Metric Data Models		Create Custom Composite
SSH Script Metrics	SSH Script Metrics	e 🖹 🗊
Tomcat JDBC Pool Metrics	Model Name	Source Type
Solaris Metrics	SSH Script Metrics	SSH Script 🔘
IIS Service Metrics		
Windows WMI Disk I/O Metrics	Counter Name	Data Type
Active Directory Log File Metrics	RTT (ms)	Numeric
Hyper-V Virtual Storage Device Metrics	Script Output	String
Amazon Redis Cache Security Group Metrics	+ Add 5 more rows	
Windows WMI Metrics		

3. A page 'Create Metric Data Model' will open. On this page, you can select the multiple source types and the counters that you want to see in the widget.

Create Metric Data Mode		2	×
Model Name Composite Model for Linux a	and Windows	Source Type	
Metrics	Metrics Disk (%) 🐼 Idle CPU (%) 🔇	Save Reset	

#### **Fields Description**

Model Name. Type the name of the model.

*Source Type*: Select the sources from the list for which you want to create a model.

*Instance (On/Off)*: Select instance as 'Off' to create scalar metrics. Select instance as 'On' to create tabular metric.

*Metrics:* Select the metrics from the list. The list shows all the metrics from all the source types (whether they are common or not).



# 5 Additional Information - Add Query in Monitors

In the network profile, suppose the device type is: PowerShell, SSH or Database Query. To add the query, edit the discovery parameters.

Update Network Discovery Profile		×
Name	IP/Host	IP Range CSV Import CIDR
shubham powershell	172.16.8.192	2
RPE	Device Types	Credential Profiles + New
Master RPE	Windows PowerShell Script 😵 dat	shubham powershell 😢
Tags       Windows       S         All Tags       Windows       S         Discovery Parameters       Image: Complexity of the second	Database Query DB2 Database MSSQL Database PostgreSQL Database MySQL Database Oracle Database	
		Update Reset

Edit the discovery parameters and type the script. You can add multiple scripts by separating them with comma. (Again! Make sure that everything you paste in 'Script' produces desired result in backend).

Windows PowerShell Script Discovery Pa	rameter Details 🛛 🗙
Port	Script
5985	\$ <u>ScriptBLock</u> = { \$ <u>CPUPercent</u> = @{ Label = ' <u>CPUUsed</u> '  ▼
Tabular	Delimiter
No	
	Update



# **Keep in touch**

www.motadata.com, sales@motadata.com,

India: +91 79-2680-0900, USA: +1 408-418-5229

#### About Motadata

Mindarray Systems Pvt. Ltd. a global IT product company, offers state of the art affordable yet powerful product suite - Motadata consisting of Network Management & Monitoring, Log & Flow Management, and IT Service Management Platforms. The platform empowers both IT administrators and CXOs to analyze, track & resolve IT operational issues by effectively monitoring various systems and devices from multiple vendors through a unified and centralized dashboard.

Motadata is industry's first IT ops solution that truly correlates the metric, flow and log events and turns them into actionable insights. Our global customers from Telecom, Government and Enterprise domain, rely on Motadata for proactively monitor their network infrastructure.

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