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AWS IOT CUSTOM (MQTT) AND DEVICE CONFIGURATION GUIDE

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In ove	rview window click on the red error message	25
In the	following window click Migrate to DigiCert Global G2	25

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1. General information

Firmware version:	03.28.06.Rev.280
Hardware revision:	280
Configurator:	1.7.45_B.3.28_R.11
Notes:	This guide does not contain any information how to store received MOTT packets in the Azure.

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2. Create IoT Hub

Login to https://portal.azure.com/

Press and select – create new resource													
=		₽ Search	resources, service	es, and docs (G+/)									
+ Create a resource	Azure serv	vices											
📶 Dashboard	+	×				SQL	2		\$				
All services	Create a resource	Quickstart Center	Virtual machines	App Services	Storage accounts	SQL databases	Azure Cosmos DB	Kubernetes services	Function App				
All resources													

Figure 1 Create new resource

Select Internet of things in the Categories on the left





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2.1. Basics

In the **Basics** tab choose your **subscription**. Create a new **Resource group**. Enter **IoT hub name** (Can be any created name). Select **Region** that is closest to you.

Choose the wanted **Tier, Free tier** should be used for testing purpose, alternatively use **standard**. (You can find all the necessary information about tiers when you click **Comapare tiers** below option box).

Then choose your **Daily message limit** according to your needs (You can find all the necessary information about **Daily message limit** when you click **See all options** below option box).

Press: Review + create

Microsoft Azure		
Home > Create a resource > Ma	rketplace >	
loT hub		
Microsoft		
Seasics Networking Ma	nagement Add-ons Tags Review +	+ create
Create an IoT hub to help you conr	ect, monitor, and manage billions of your IoT a	issets. Learn more 🗹
Project details		
Choose the subscription you'll use organize and manage resources.	to manage deployments and costs. Use resource	e groups like folders to help you
Subscription * 🕕	Azure for Students	\sim
Resource group * ①	TestGroup	~
	Create new	
Instance details		
IoT hub name * 🕕	Naujas	\checkmark
Region * 🛈	North Europe	~
Tier *	Free	~
	Free trial explores the app with live da later.	ata. Trials cannot scale or be upgraded
	Compare tiers	
Daily message limit * 🕕	8,000 (\$0/month)	\sim
	Eree IoT hubs are limited to one per	ar subscription

Review + create

revious Next: Networking >

Figure 3 Basics parameters

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Check if all the parameters are as you intended and click Create.

■ Microsoft Azure		𝒫 Search resources, services, and docs (G+/)	D	Ģ	Q :	<u>ه</u> و) ନ ୍
Home > Create a resource >							
IoT hub … _{Microsoft}							
Basics Networking Managemer	nt Add-ons Tags Review + create						
Pricing							
loT hub	\$25 USD per month Change basics						
Add-ons total	\$0.001 USD per device per month Change add-ons						
Basics							
Subscription	Azure for Students						
Resource group	TestGroup						
IoT hub name	TestHubTeltonika						
Region	North Europe						
Disaster recovery enabled	Yes						
Tier	Standard						
Daily message limit	400,000 (\$25/month)						
Networking							
Connectivity configuration	Public access						
Private endpoint connections	None						
Allow public network access	Enabled						
Management							
Tier	S1						
Number of S1 IoT hub units	1						
Device-to-cloud partitions	2						
Create < Previous: Tags	Next > Automation options						

Figure 4 Creating IoT hub

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3. Add device

Press

, **Home** and click on your created IoT Hub.

≡	م	earch resources, servi	ices, and docs (G+/)							۶.	Ģ	P 👳	0	R
+ Create a resource														
A Home	Azure services													
🖾 Dashboard	+ 🖌				SQL	1	00	4	\rightarrow					
E All services	Create a Quicks	art Virtual	App Services	Storage	SQL databases	Azure Cosmos	Kubernetes	Function App	More services					
★ FAVORITES	resource Cente	machines		accounts		DB	services							
All resources														
Resource groups	Resources													
😨 App Services	Pacant Envorite													
Function App	Recent Pavonte													
🧧 SQL databases	Name			Туре				Last Viewed						
🧟 Azure Cosmos DB	🛪 TestHubTeltonika			IoT Hul	0			11 minutes ag	0					
Virtual machines	(iii) TestGroup			Resour	ce group			11 minutes ag	0					
💠 Load balancers	See all													
Storage accounts														
 Virtual networks 	Navigate													
Azure Active Directory	-													
🕑 Monitor	🔶 Subscriptions	[•]	Resource groups		All resource	25	∠ h	Dashboard						
🐢 Advisor														
Microsoft Defender for Cloud	Tools													
🙆 Cost Management + Billing		-												
2 Help + support	Learn Azure with free training from Micros	online ft	Azure Monitor Monitor your apps an infrastructure	d	Microsoft D Secure you infrastructu	Defender for Cloud r apps and ire	Ş	Cost Management Analyze and optimiz cloud spend for free	e your					
	Useful links						Azure	mobile app						
	Technical Documentation 더 Azure Migration Tools	Azure Find a	Services ⊠ [®] n Azure expert		Recent Azure Upda Quickstart Center	tes 🗗	É A	op Store	Boogle Play					

Figure 5 Selecting IoT Hub

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Copy hostname and press **devices** In the left menu.

If you see a warning:

• This resource uses a certificate on the Baltimore CyberTrust Root which will expire in 2025 and must be migrated to the DigiCert Global G2 root.

Go to: Migrate to DigiCert Global G2 section at the bottom of this tutorial.

≡ Microsoft Azure	✓ Search resources, services, and docs (G+/)		D 4 0 8						
Home >									
TestHubTeltonika	\$ \$ ···								
₽ Search «	$ ightarrow$ Move $ ightarrow$ 📋 Delete 🕐 Refresh $\not\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$								
🕺 Overview 🄶									
Activity log	▲ This resource uses a certificate on the Baltimore CyberTrust Root which will expire in 2025 and must be	migrated to the DigiCert Global G2 root. To avoid service disruption it must be	migrated by September 15th 2023. What do I need to do?						
Access control (IAM)									
🔷 Tags	∧ Essentials		Copy to clipboard						
× Diagnose and solve problems	Resource group (move) : TestGroup	Hostname : Tes	stHubTeltonika.azure-devices.net 🗈						
🗲 Events	Status : Active	Tier : Sta	indard						
Device management	Location : North Europe	Daily message limit : <u>40</u>	0.000						
Device management	Image: Service region : Notification Subscription (move) : Azure for Students								
Devices	certifi : Additas								
 IoT Edge 									
Configurations + Deployments	see more								
Opdates	Usage Get started								
🔎 Queries	Show	data for last: 1 Hour 6 Hours 12 Hours 1 Day 7 Days	30 Days						
Hub settings									
- Built-in endpoints									
😢 Message routing	IoT Hub Usage	Number of messages used	Device to cloud messages						
🕒 File upload									
🐣 Failover	Messages used today: 0	80	80						
O Pricing and scale		70	70						
Properties	Daily messages quota: 400000 ①	50	60 50						
	IoT Devices: 0	40	40						
Security settings		10	10						
💲 Identity		0	0						
📍 Shared access policies 🖕		12 PM 6 PM Aug 11 6 AM UTC+03:00 Total number of messages used (Max)	12 PM 6 PM Aug 11 6 AM UTC+03:00 Telemetry messages sent (Sum)						
			 Manual Action Act						

Figure 6 Domain and devices

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Select Add Device in Devices tab.

≡	Microsoft Azure		₽ Search reso	urces, services, and docs ((G+/)				>_	β) ©	0	ন্দ
Hom	e > TestHubTeltonika												
	TestHubTeltonika	Devices ጵ ☆ …											
<mark>,</mark> ₽ s	iearch «	View, create, delete, and update de	vices in your IoT Hub. <u>Learn m</u>	ore									
æ e	Overview	+ Add Device == Edit column	ns 🖒 Refresh 🖉 Assign	tags 🗐 Delete									
a	ctivity log		Turner all and disc										
^ ∧	access control (IAM)	Y enter device ID	Types: All + Add filte										
Ф.Т	ags	Davies ID	Turne	Status	Last status undate	Authentication tune	C2D mossages queued	Tage					
×c	Diagnose and solve problems	Device iD	Type	Status	Last status update	Authentication type	C2D messages queued	Tags					
۶ E	vents	There are no devices to display.											
Devic	e management												
	Devices												
💁 Io	oT Edge												
<u> </u>	Configurations + Deployments												
🧼 u	Ipdates												
🔎 o	Queries												
Hub s	settings												
	uilt-in endpoints												
K N	Aessage routing												
P F	ile upload												
æ F	ailover												
0 P	ricing and scale												
P	roperties												
🔒 L	ocks												
Secur	ity settings												
😢 Io	dentity												
https://p	ortal.azure.com/?Microsoft_Azure_Educ	ation_correlationId=51a33bc9-a3eb-4313-	ba2b-846311521742&Microsoft,	Azure_Education_newA4E=t	true&Microsoft_Azure_Education_asoSi	ubGuid=db7be326-dcec-441f-a7d1-d0t	b2c5456111#@viko.lt/resource/subsc	iptions/db7b	e326-dcec	-441f-a7d	1-d0b2c5	456111/re	sourc

Figure 7 Add Device

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Once you are inside **Create a device** tab:

Enter your device IMEI in the **device ID** field.

Other fields here should be left default

Authentication type: Symmetric key Connection this

device to an lot Hub: Enabled

Press save.

=	Microsoft Azure	${\cal P}$ Search resources, services, and docs (G+/)	\geq	Ŗ	Q	۵	?	ন্দ
Home	> TestHubTeltonika Devices >							
\mathbf{x}	Create a device							
-								
0	Find Certified for Azure IoT devices in the Device Catalog							
Davis								
3596	32107351634							
0	T Edge Device							
Auther	ntication type ()							
Sym	metric key X.509 Self-Signed X.509 CA Signed							
Auto-g	generate keys 🛈							
\checkmark								
Conne	ct this device to an IoT hub ①							
Barant	device O							
Nop	parent device							
Set a	parent device							

Figure 8 Creating a device UAB TELTONIKA TELEMATICS Saltoniskiu st. 9B-1, LT-08105 Vilnius, Lithuania STE STE VSTEA Registration code 305578349 VAT number LT100013240611 DNV·G DNV DNV.GL Swedbank AB ISO 9001 ISO 14001 ISO 45001 9

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4. Share access policies

To get your primary and secondary keys go to **Shared access policies**, change **Connect using shared access policies** to **Allow** and click on **iothubowner**.

	Microsoft Azure		℅ Search resources, services, and docs (G+/)	D (₽ Q		
Home	e > TestHubTeltonika						
•	TestHubTeltonika Share	d access policies 👒	☆ …				
₽ s	earch « Shared	access policies may be used to generat	e security tokens to consume IoT hub functionality. Learn more				
Devic	e management * Connec	t using shared access policies					
🖲 D	evices Sa	ve 🏷 Discard change					
💁 lo	oT Edge All	ow					
😤 c	onfigurations + Deployments	ny					
🧼 υ	Ipdates Manag	e shared access policies					
) 🔍	ueries + Ac	d shared access policy 🖒 Refresh	Delete				
Hub s	ettings						
⊛- В	uilt-in endpoints	Policy Name	Permissions				
¥ N	lessage routing	iothubowner	Registry Read, Registry Write, Service Connect, Device Connect				
🕒 Fi	ile upload	service	Service Connect				
🐣 Fi	ailover						
0 P	ricing and scale	device	Device Connect				
P	roperties	registryRead	Registry Read				
🔒 Li	ocks	registryReadWrite	Registry Read, Registry Write				
Secur	ity settings						
💲 lo	lentity						
📍 s	hared access policies						
<⇔ N	letworking						
🔎 c	ertificates						

Figure 9 Shared access policies

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An **iothubowner** tab will pop out on the right.

Copy:

- 1. Primary key
- 2. Secondary key
- 3. "iothubowner"

P Search	«	Shared access policies may be used to general	e security tokens to consume IoT hub functionality. Learn more	🕄 Regenerate primary key 🐧 Regenerate secondary key 🏌 Swap keys
evice management		Connect using shared access policies	,	Primary key
Devices		🗟 Save 🏷 Discard change		Secondari kav
IoT Edge		Allow		(c)
Configurations + Deployments		O Deny		Primary connection string
Updates	L			······
Queries	L	Manage shared access policies		Secondary connection string
ub settings	L	+ Add shared access policy O Refresh	III Delete	
- Built-in endpoints	L	Policy Name	Permissions	Permissions
Message routing	L		Deside Deal Deside With Control Control Deside Control	Registry Kead
File upload	L	lothubowner	Registry Read, Registry Write, Service Connect, Device Connect	✓ Registry whice ✓ Service Connect
Failover	L	service	Service Connect	V Device Connect
Pricing and scale	L	device	Device Connect	
Properties	L	registryRead	Registry Read	
Locks	L	registryReadWrite	Benistry Read Benistry Write	
curity settings	L	- registry/teaurite	negouy new, negouy mine	
Identity	1			
Shared access policies				
Networking				
Certificates				
fender for IoT				
Overview				
Security Alerts				

Figure 10 Saving keys

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5. Configuration

In the GPRS tab, under Server Settings select:

- 1. Domain Hostname (copy here the host name from your lot Hub overview window in Azure)
- 2. Port: 8883
- 3. Protocol MQTT
- 4. TLS Encryption TLS/DTLS

In the GPRS tab, under MQTT Settings select:

- 1. MQTT Client type Azure IoT
- 2. Device ID: IMEI
- 3. Primary SAS key Primary key from 'iothubowner' shared access policy
- 4. Secondary SAS key **Secondary** key from 'iothubowner' shared access policy
- 5. SAS Policy Name *iothubowner*



Figure 11 Device configuration

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6. Certificate creation and upload

6.1. Converting certificate to .pem format

Download DigiCert Global Root G2 and put it inside a new folder: Download DER/CRT

1. Run the File Explorer, locate and double-click your .cer file;

Th	is PC > Local Disk (C:) > PS	~	ට Sea	rch PS
	Name	Date modified	Туре	
:ess	🍺 test.pfx	1/23/2020 5:11 AM	Persona	al Inforr
н <i>я</i> г.	tstcert.cer	1/23/2020 5:06 AM	Security	/ Certifi
ads 🖈 ents 🖈	😽 Certificate		×	
яя ^р	General Details Certification Path			
A A	Certificate Information			
32	This CA Root certificate is not trus install this certificate in the Truste Authorities store.	ted. To enable trust, d Root Certification		
)_01_17 09:5				
	Issued to: test.contoso.com			
	Issued by: test.contoso.com			
	Valid from 1/23/2020 to 1/23	/2021		
	I Install Cert	ificate Issuer Stat	ement	

Figure 12 Certificate creation 1

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2. In the certificate properties window go to the Details tab and click on the "Copy to File" button;

Figure 13 Certificate creation 2

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- 3. Press Next on the first step of Certificate Export Wizard;
- Now you need to select the certificate export format. Select the option "BASE-64 encoded X.509 (.CER)" and click Next;

Export File Format Certificates can be exported in a variety of file formats.
Select the format you want to use:
O DER encoded binary X.509 (.CER)
Base-64 encoded X.509 (.CER)
<u>Cryptographic Message Syntax Standard - PKCS #7 Certificates (.P7B)</u>
Include all certificates in the certification path if possible
<u>Personal Information Exchange - PKCS #12 (.PFX)</u>
Include all certificates in the certification path if possible
Delete the private key if the export is successful
Export <u>all</u> extended properties
Enable certificate privacy
○ Microsoft Serialized Certificate S <u>t</u> ore (.SST)
Next

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5. Specify the file name;

- 🐓	Certificate Export	Wizard			
Fi	ile to Export Specify the name	e of the file you w	ant to export		
	<u>File name:</u>				
	new_cert				Browse
				N	lext Cance
				<u> </u>	

Figure 15 Certificate creation 4

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6. Press the Finish button;

🗧 🌮 Certificate Export Wizard	×
Completing the Certifica	ite Export Wizard
You have successfully completed the C	Certificate Export wizard.
You have specified the following setting	gs:
File Name	C: \PS \new_cert.cer
Include all certificates in the certificat	tion path No
File Format	Base64 Encoded X.509 (*.cer)
	Finish Cancel
	Linar

Figure 16 Certificate creation 5

PowerShell	🗈 Сору
<pre>Rename-Item -Path "c:\logfiles\daily_file.txt" -NewName "monday_file.txt"</pre>	

7. Now you can change your certificate file extension from .cer to .pem. You can use the following PowerShell command:

Certificate.pem will be created.

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6.2. Upload certificate to device

Upload the file you have created to the device using configurator > Security > Certificate > upload

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7. Data sending

Trigger a high priority event so that device would start to send data to the server.

In the device configurator screen check for the Status > GSM Info > Records Sent records count.



Figure 17 Sent records count

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DNV·G

ISO 14001

DNV.GL

ISO 9001

CVSTEA

DNV·G

ISO 45001

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On the Azure service > IOT hub > Overview there is a Device to cloud chart that will show the recordsreceived. Be aware - this window has noticeable delay.

							© 0	୭ ନ	
Home >									
NaujasHubas 🖉 🖈	ť								
✓ Search «	$ ightarrow$ Move \checkmark 📋 Delete 🖒 Re	fresh 🔊 Feedback							
🕺 Overview 🄶	∧ Essentials								
Activity log	Resource group (move) : TestGroup			Hostname	: NaujasHubas.azure-devices.net				
Access control (IAM)	Status : Active			Tier	: Free				
🗳 Tags	Location : North Euro	ope		Daily message limit	: 8,000				
× Diagnose and solve problems	Service region : North Euro	ope Students		Device streams (preview)) : https://db-001.northeurope-001.strea Device streams documentation	ms.azure-devices.n	it		
🗲 Events	Tans (edit)	<u>Sudens</u>							
Device management	See more								
Devices	Usage Get started								
IoT Edge		Show d	ita for last: 1 Hour 6 Hours 1	2 Hours 1 Day 7 Da	vs 30 Davs				
🙎 Configurations + Deployments			(1100 011000 0		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
🧼 Updates									
Dueries		IoT Hub Usage	Number of messages used	Ŕ	Device to cloud messages		Ŕ		
Hub settings					50				
 Built-in endpoints 		Messages used today: 56	100						
🔀 Message routing		 Daily messages quota: 8000 0 	80		40				
🕒 File upload		Daily messages quota. 0000 ()	60		30				
🐣 Failover		IoT Devices: 1	40		20				
O Pricing and scale			20		10				
Properties									
Locks			06 PM Aug 28	6 AM UTC+03:00	06 PM Aug 28	6 AM	JTC+03:00		
Security settings			Total number of messages used (Max) naujashubas		Telemetry messages sent (Sum) naujashubas				
💲 Identity			102		62				
🕈 Shared access policies 🗸 🗸									

Figure 18 IoT hub overview

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8. Checking received data in Azure IoT Explorer

8.1. Downloading Azure IoT Explorer

The data received from the device can be found in the Azure IoT Explorer

Go to: <u>https://github.com/Azure/azure-iot-explorer/releases</u> Find the latest version and download the file with .msi header:

 Addressing two dtdl bugs related to simply types #586 #44 Supports nested maps of dtdl #505 	49	
elease Notes:		
nis release does not contain a pre-built Mac binary. We are c	urrently experiencing issues with our pack	age builder for
ac, so unfortunately for now we've removed that binary asset cally on mac, but you may encounter errors building binaries	from the release. You should still be able (npm run package:mac may fail).	to run the proje
ac, so unfortunately for now we've removed that binary asset cally on mac, but you may encounter errors building binaries Assets 4	from the release. You should still be able (npm run package:mac may fail).	to run the proje
ac, so unfortunately for now we've removed that binary asset cally on mac, but you may encounter errors building binaries Assets 4 @azure-iot-explorer_0.15.8_amd64.deb	from the release. You should still be able (npm run package:mac may fail). 124 MB	to run the proje Mar 1
Assets 4 Pazure-iot-explorer_0.15.8_amd64.deb Pazure.loT.Explorer.Preview.0.15.8.msi	from the release. You should still be able (npm run package:mac may fail). 124 MB 156 MB	to run the proje Mar ⁻ Mar ⁻
Assets 4 Qazure-iot-explorer_0.15.8_amd64.deb Assure-iot-explorer.Preview.0.15.8.msi Source code (zip)	from the release. You should still be able (npm run package:mac may fail). 124 MB 156 MB	to run the proje Mar ⁻ Mar ⁻ Mar ⁻

Figure 19 Azure IoT explorer 1

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After opening Azure explorer click:

- 1. IoThubs
- 2. Add connection

In the pop-up bar enter **primary connection string** which you can get from **Shared access policies** which was explored in section 4.

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Click save after completion.



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DNV.GI

ISO 14001

DNV.GL

ISO 9001

DNV.GL

ISO 45001

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Click the Name of your hub which will be in blue color.

Select the device that you want to explore by clicking on it's IMEI.

On the following window click **Telemetry** and the **Start.**





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Example of data sent in JSON format:

Azure IoT Explorer (preview) Ela Edit View Window Malo		– 0 ×
Azure IoT Explorer (preview)		🎯 Settings
Home > NaujasHubas >	Devices > 359632107351634 > Telemetry	
-	📕 Stop 📃 Show system properties 👔 Clear events -{} Simulate a device — 🏹 Customize Content Type	
 Device identity Device twin 	Telemetry You can manitar telemetry that the device sends to the IoT hub	
Telemetry	Consumer group O SDefault	
> Direct method	Specify enqueue time () () No	
Cloud-to-device message	Use built-in event hub	
Module identities	Pes Pes O Receiving events	
S ^o IoT Plug and Play components	Mon Aug 28 2023 13:18:39 GMT-0300 (Eastern European Summer Time):	
	<pre>""""""""""""""""""""""""""""""""""""</pre>	

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Figure 22 Records JSON

Example of data sent in Codec 8 format:

Azure IoT Explorer (preview) File Edit View Window Help		σ×
Azure IoT Explorer (preview) Home > NaujasHubas >	Devices > 359632107351634 > Telemetry	Settings
≡	📕 Stop 🔲 Show system properties 🍵 Clear events - {} Simulate a device - 👎 Customize Content Type	
Device identity	Telemetry You can maintur telemetry that the device sends to the IoT hub	
Telemetry	Consumer group (O) (Debuilt	
✓ Direct method	Specify enqueue time O	
Cloud-to-device message	Use built-in event hub	
St Module identities		
$\delta^{\rm g}$ -loT Plug and Play components	O necessing sentil	
	<pre>{ Stody *: "ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub00/ub0</pre>	00°\u001a\u001
	Mon Aug 28 2023 13.09:26 GMT+0300 (Eastern European Summer Time):	
	{ "bady": "\u0000\u0001\u0000\u0001\u0000\u0001\u0000\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u00001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u0001\u	0\u0000`\u0014
	Mon Aug 28 2023 13:09:25 GMT-4030 (Exstern European Summer Time):	
	<pre>{ "sody": "ub000/ub001/ub001/ub000/ub000/ub000/ub000/ub000/ub000/ub001/ub002/ub002/ub002/ub002/ub002/ub002/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub00/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub000/ub00/</pre>	0/u0000`/u001:

Figure 23 Records Codec 8

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9. Migrate to DigiCert Global G2 (If you saw a warning in overview)

In overview window click on the red error message

8 This resource uses a certificate on the Baltimore CyberTrust Root which will expire in 2025 and must be migrated to the DigiCert Global G2 root. To avoid service disruption it must be migrated by September 15th 2023. What do I need to do?				
∧ Essentials			1507	N View
Resource group (mov	e) : TestGroup	Hostname	1	
Status	: Activating	Tier	: Basic	
Location	: North Europe	Daily message lin	iit : <u>400.000</u>	
Service region	: North Europe			
Subscription (move)	: Azure for Students			
Tags (edit)	: Add.tags			
See more				
Usage Get started				

In the following window click Migrate to DigiCert Global G2





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On the next window check all the boxes and click Update

=	Microsoft Azure	P Search resources, services, and docs (G+/)	Σ	6 G	0	0	R
Home	> Belekas > Update resource certificate —						
Before	migrating this resource to a certificate on the DigiCert Global G2 root, ensure that all d	levices are updated to contain the public portion of the G2 root. Devices will disconnect and reconnect using the new root. Learn more					
We su	ggest monitoring current connections but another metric may be more appropriate for	your situation. Go to Metrics->					
Conr	vected Devices						
	00. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 1	A.g.22 8.AM					
	am more about IoT Hub migration have updated my devices to trust the DigiCert Global G2 root. understand that any devices not updated will not be able to connect. understand that my IoT hub's IP address may change as part of this migration, and that understand that my devices will be disconnected and will reconnect using the DigiCert (it can take up to an hour for devices to reconnect. Slobal G2 root.					
G	ncel Update						

Migration may take up to a minute. You can now continue with the instructions from where you left off.

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