

Host

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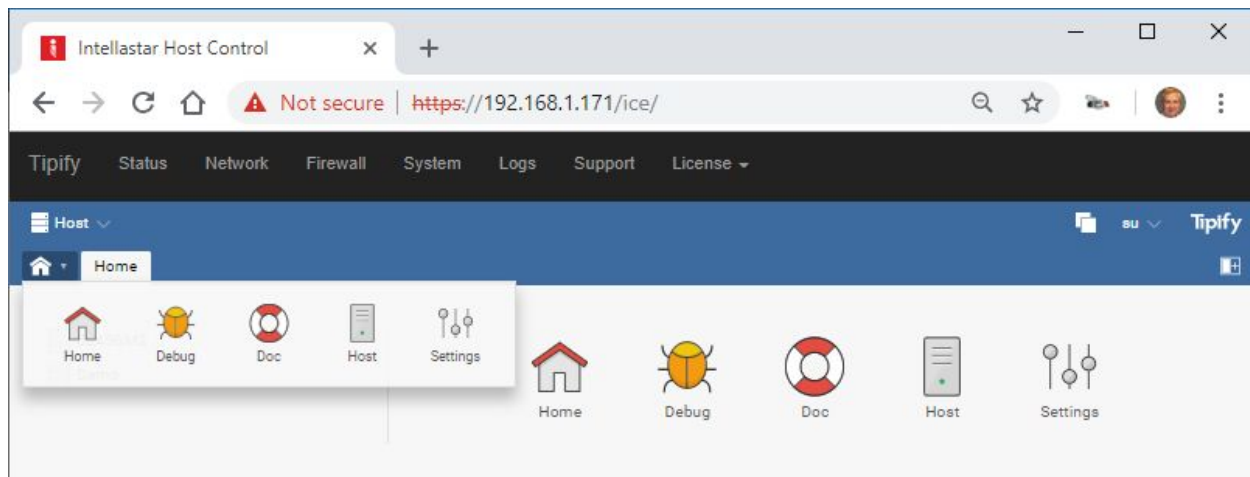
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Introduction

This document guides you through use of Host app in Tipify™.

Overview

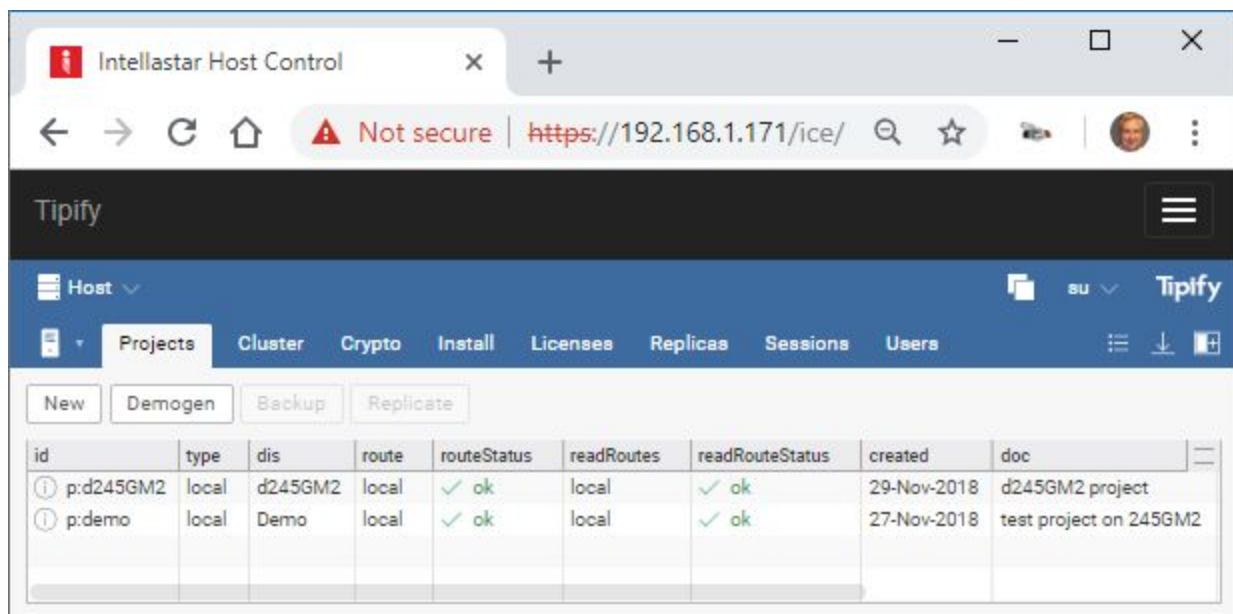
After you login to Tipify™, you will be presented with the Home screen. Select the Host icon or select Host from the App Menu in the upper left to start the Host app.



The Host app provides Projects, Cluster, Crypto, Install, Licenses, Project Manager, Replicas, Sessions and Users.

Projects

Projects provides a list of databases in a server or your database in an InferStack™ device.



New

You can create a new project here.

Note: You should provide a unique name for each project in case they will be clustered at some point.

Demogen

This will generate a demonstration database.

Note: You should not generate a demo database in a device as it can overwhelm it.

Backup

This will backup your project to a zip file.

Note: The project zip will not contain some items you may need like Modbus Register Maps and Platform Control Settings.

Replicate

Replication is a feature of Folio used to automatically clone the database to one or more nodes in an Arcbeam cluster.

Replication is used primarily for the following two use cases:

- Maintain an up-to-date backup of a project
- Provide high availability read cache of a project for XQueries

Select projects to replicate and press Replicate.

The screenshot shows the Tipify web interface. The browser address bar indicates the URL is localhost:8080/ui#dea2239403ce. The interface has a top navigation bar with 'Host' and 'Tipify' labels. Below this is a secondary navigation bar with tabs: 'Projects', 'Cluster', 'Crypto', 'Install', 'Licenses', 'Replicas', 'Sessions', and 'Users'. The 'Projects' tab is active. Below the tabs are buttons for 'New', 'Demogen', 'Backup', and 'Replicate'. A table displays the following project data:

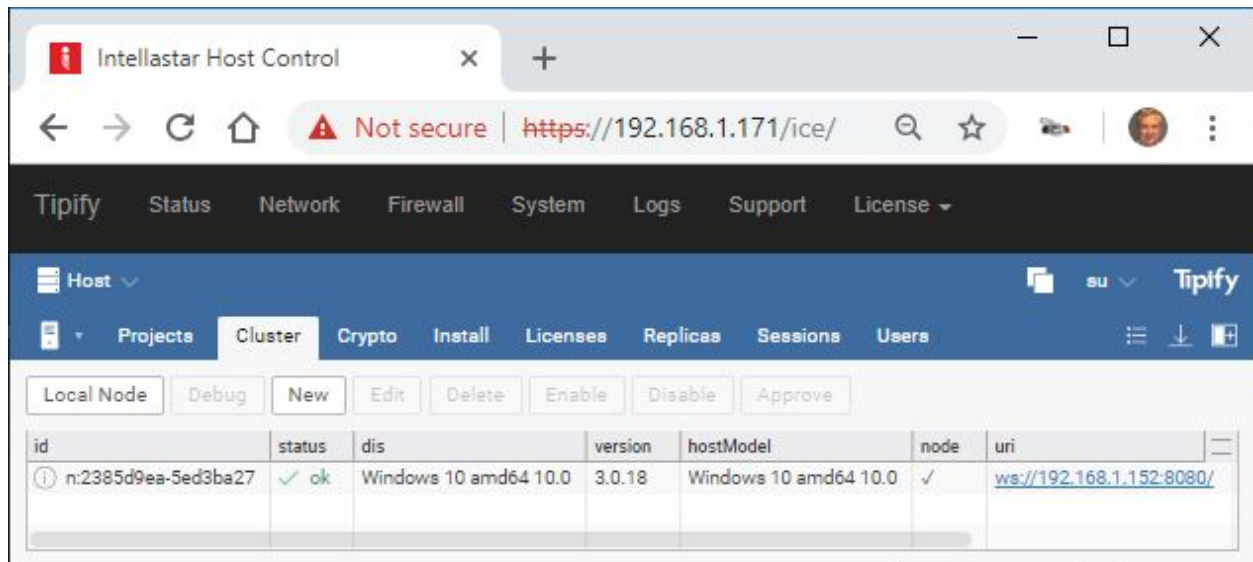
id	type	dis	route	routeStatus	readRoutes	readRouteStatus	created	doc	version	routeErr
p:d245GB3	replica	d245GB3	test245GB3	✓ ok	test245GB3	✓ ok				
p:d245GL2	replica	d245GL2	test245GL2	✓ ok	test245GL2	✓ ok				
p:d245GM2	replica	d245GM2	245L	✓ ok	245L	✓ ok				
p:d245GM3	replica	d245GM3	test245GM3	✓ ok	test245GM3	✓ ok				
p:demo	local	Demo	local	✓ ok	local	✓ ok	20-Nov-2018	Demo project	3.0.18	

Cluster

Cluster lets you manage access to clusters.

Tipify includes sophisticated clustering features which allow two or more Tipify nodes to behave seamlessly as a single system. Clustering features include:

- Tunnel fresco UI from any machine in the cluster
- Route REST API calls from any machine in the cluster
- View all your projects from any machine in the cluster
- User navigation of data may span multiple projects across cluster
- XQuery APIs to perform distributed reads and computations
- Replication to maintain readonly copies of Folio databases



Cluster Compatibility

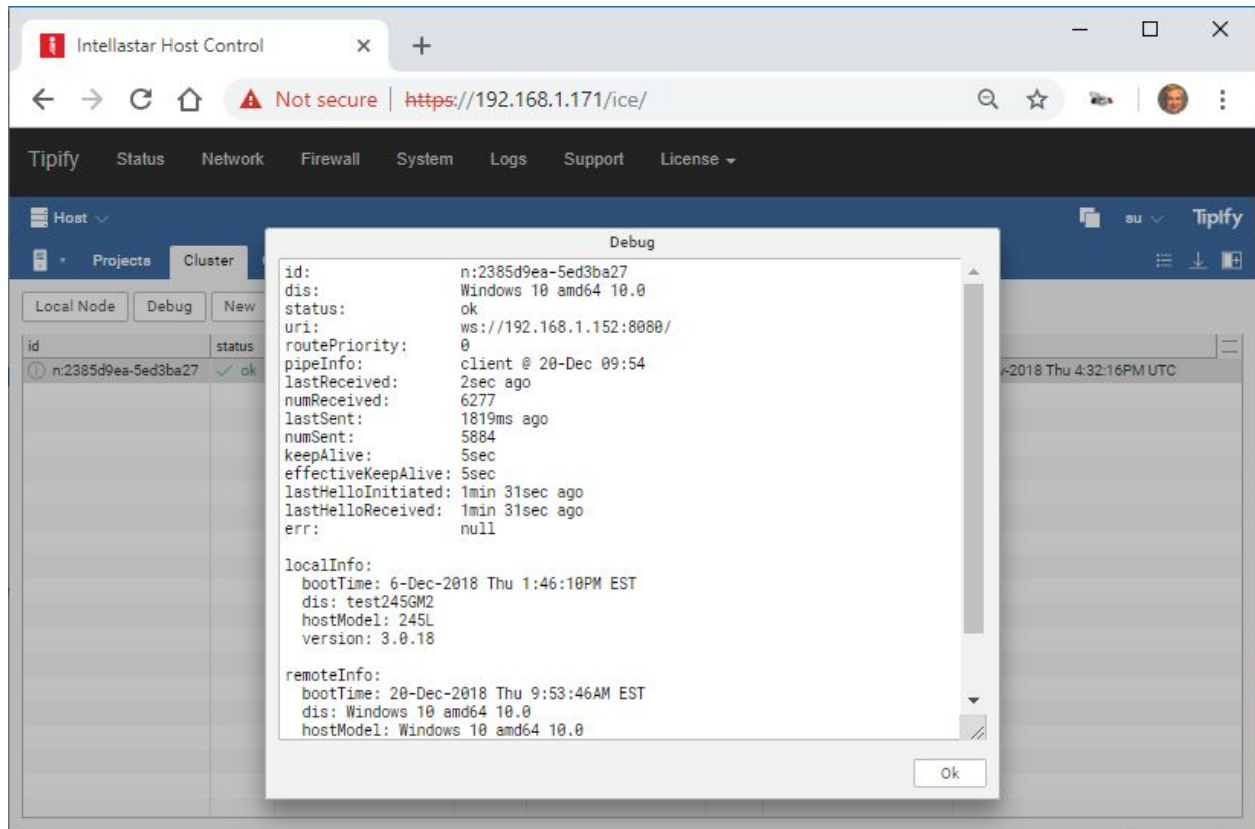
If you have a mixed version cluster you will need to disable attestCookies until the entire cluster is upgraded 3.0.20. Otherwise 3.0.20 should be fully compatible with 3.0.18 and 3.0.19.

Local Node

Provides your cluster information (including public key) to give access to another device.

Debug

This provides debug information on your clusters.



New

Allows you to paste cluster information from another device.

Edit

Delete

Enable

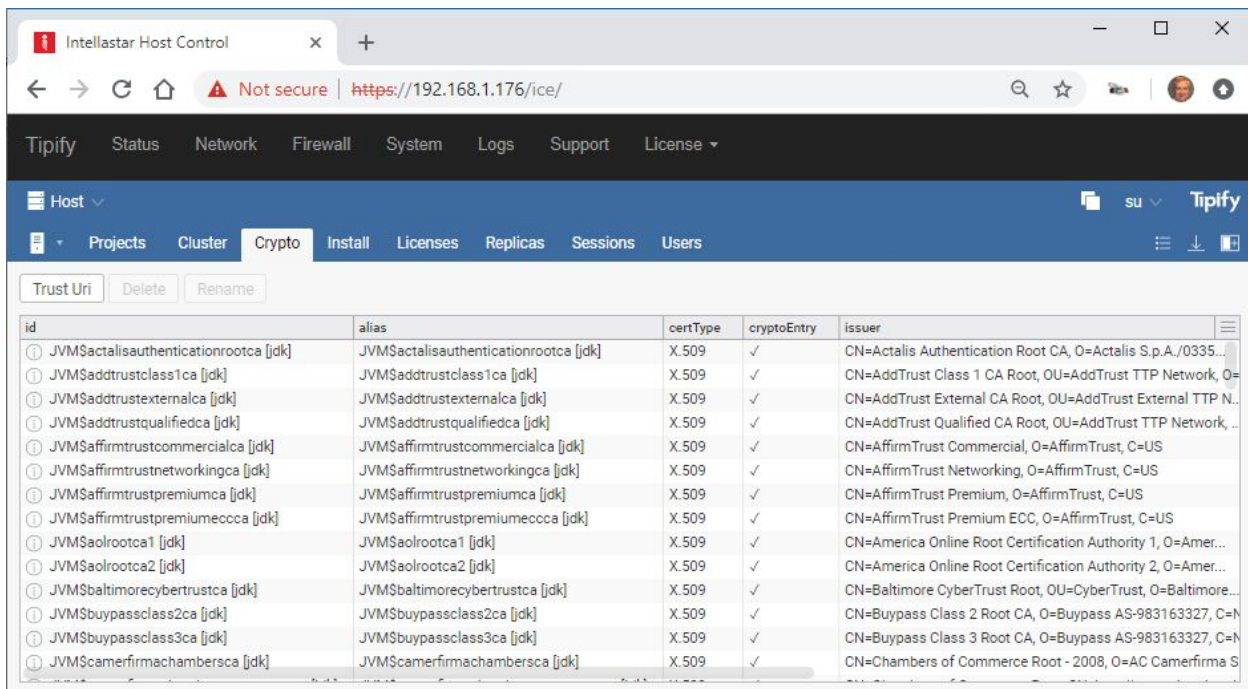
Disable

Approve

Crypto

SkySpark maintains its own trust store for trusted certificates. By default, the trust store includes every trusted certificate in the Java environment. To trust all the certificates for any SSL/TLS endpoint (e.g. HTTP, SMTP, etc.) use the following procedure:

1. Go the **Host** app in SkySpark
2. Select the **Crypto** view
3. Click the **Trust Uri** action button
4. In the dialog enter the uri of the SSI/TLS endpoint for which you want to trust all the certificates. The alias is optional.
5. Click Ok.



id	alias	certType	cryptoEntry	issuer
① JVM\$actalisauthenticationrootca [jdk]	JVM\$actalisauthenticationrootca [jdk]	X.509	✓	CN=Actalis Authentication Root CA, O=Actalis S.p.A./0335...
① JVM\$addtrustclass1ca [jdk]	JVM\$addtrustclass1ca [jdk]	X.509	✓	CN=AddTrust Class 1 CA Root, OU=AddTrust TTP Network, O=...
① JVM\$addtrustexternalca [jdk]	JVM\$addtrustexternalca [jdk]	X.509	✓	CN=AddTrust External CA Root, OU=AddTrust External TTP N...
① JVM\$addtrustqualifiedca [jdk]	JVM\$addtrustqualifiedca [jdk]	X.509	✓	CN=AddTrust Qualified CA Root, OU=AddTrust TTP Network, ...
① JVM\$affirmtrustcommercialca [jdk]	JVM\$affirmtrustcommercialca [jdk]	X.509	✓	CN=AffirmTrust Commercial, O=AffirmTrust, C=US
① JVM\$affirmtrustnetworkingca [jdk]	JVM\$affirmtrustnetworkingca [jdk]	X.509	✓	CN=AffirmTrust Networking, O=AffirmTrust, C=US
① JVM\$affirmtrustpremiumca [jdk]	JVM\$affirmtrustpremiumca [jdk]	X.509	✓	CN=AffirmTrust Premium, O=AffirmTrust, C=US
① JVM\$affirmtrustpremiumeccca [jdk]	JVM\$affirmtrustpremiumeccca [jdk]	X.509	✓	CN=AffirmTrust Premium ECC, O=AffirmTrust, C=US
① JVM\$saolrootca1 [jdk]	JVM\$saolrootca1 [jdk]	X.509	✓	CN=America Online Root Certification Authority 1, O=Amer...
① JVM\$saolrootca2 [jdk]	JVM\$saolrootca2 [jdk]	X.509	✓	CN=America Online Root Certification Authority 2, O=Amer...
① JVM\$baltimorecybertrustca [jdk]	JVM\$baltimorecybertrustca [jdk]	X.509	✓	CN=Baltimore CyberTrust Root, OU=CyberTrust, O=Baltimore...
① JVM\$buypassclass2ca [jdk]	JVM\$buypassclass2ca [jdk]	X.509	✓	CN=Buypass Class 2 Root CA, O=Buypass AS-983163327, C=N...
① JVM\$buypassclass3ca [jdk]	JVM\$buypassclass3ca [jdk]	X.509	✓	CN=Buypass Class 3 Root CA, O=Buypass AS-983163327, C=N...
① JVM\$camerfirmachambersca [jdk]	JVM\$camerfirmachambersca [jdk]	X.509	✓	CN=Chambers of Commerce Root - 2008, O=AC Camerfirma S...

Trust Uri

In the dialog enter the URI of the SSI/TLS endpoint for which you want to trust all the certificates. The alias is optional. URI is just specified in order to download the certificate at the given address and add it to your trust store. The alias is what you can use to add your own meta-data for what that certificate is.

Note: You should enter a Trust URI for a device before you attempt to add a Haystack connector.

Delete

Rename

Install

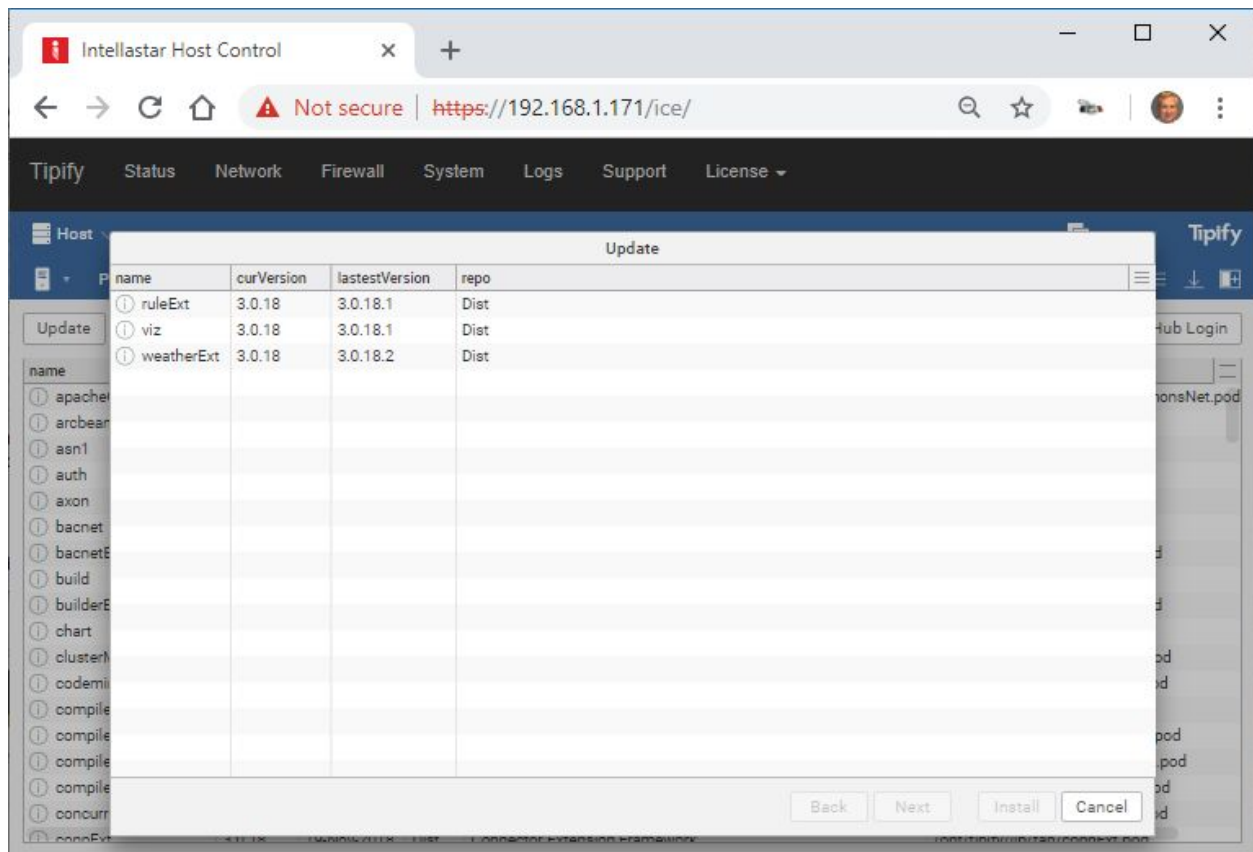
Install Manager replaces Host Updates & Stackhub.

name	version	date	repo	summary	file
① apacheCommonsNet	3.6	26-Sep-2018	Dist	Apache Commons Net rolled up into a pod	/opt/tipify/lib/fan/apacheCommonsNet.pod
① arcbeam	3.0.18	19-Nov-2018	Dist	Arcbeam network protocol	/opt/tipify/lib/fan/arcbeam.pod
① asn1	3.0.18	19-Nov-2018	Dist	ASN.1 Data Model	/opt/tipify/lib/fan/asn1.pod
① auth	3.0.18	19-Nov-2018	Dist	Authentication framework	/opt/tipify/lib/fan/auth.pod
① axon	3.0.18	19-Nov-2018	Dist	Axon scripting engine	/opt/tipify/lib/fan/axon.pod
① bacnet	3.0.18	19-Nov-2018	Dist	BACnet core library	/opt/tipify/lib/fan/bacnet.pod
① bacnetExt	3.0.18	19-Nov-2018	Dist	BACnet Connector Extension	/opt/tipify/lib/fan/bacnetExt.pod
① build	1.0.71.18	19-Nov-2018	Dist	Fantom build utility	/opt/tipify/lib/fan/build.pod
① builderExt	3.0.18	19-Nov-2018	Dist	Builder Extension	/opt/tipify/lib/fan/builderExt.pod
① chart	3.0.18	19-Nov-2018	Dist	Legacy 2.1 charting toolkit	/opt/tipify/lib/fan/chart.pod
① clusterMod	3.0.18	19-Nov-2018	Dist	Clustering system module	/opt/tipify/lib/fan/clusterMod.pod
① codemirror	3.0.18	19-Nov-2018	Dist	CodeMirror Text Editor	/opt/tipify/lib/fan/codemirror.pod
① compiler	1.0.71.18	19-Nov-2018	Dist	Fantom compiler	/opt/tipify/lib/fan/compiler.pod
① compilerDoc	1.0.71.18	19-Nov-2018	Dist	Compiler to model and generate API docs	/opt/tipify/lib/fan/compilerDoc.pod

We have also made significant changes under the covers to make it easier to manage your StackHub pods between SkySpark builds. Pods from StackHub are installed into your var/lib/fan directory and not mixed up with the core distro pods.

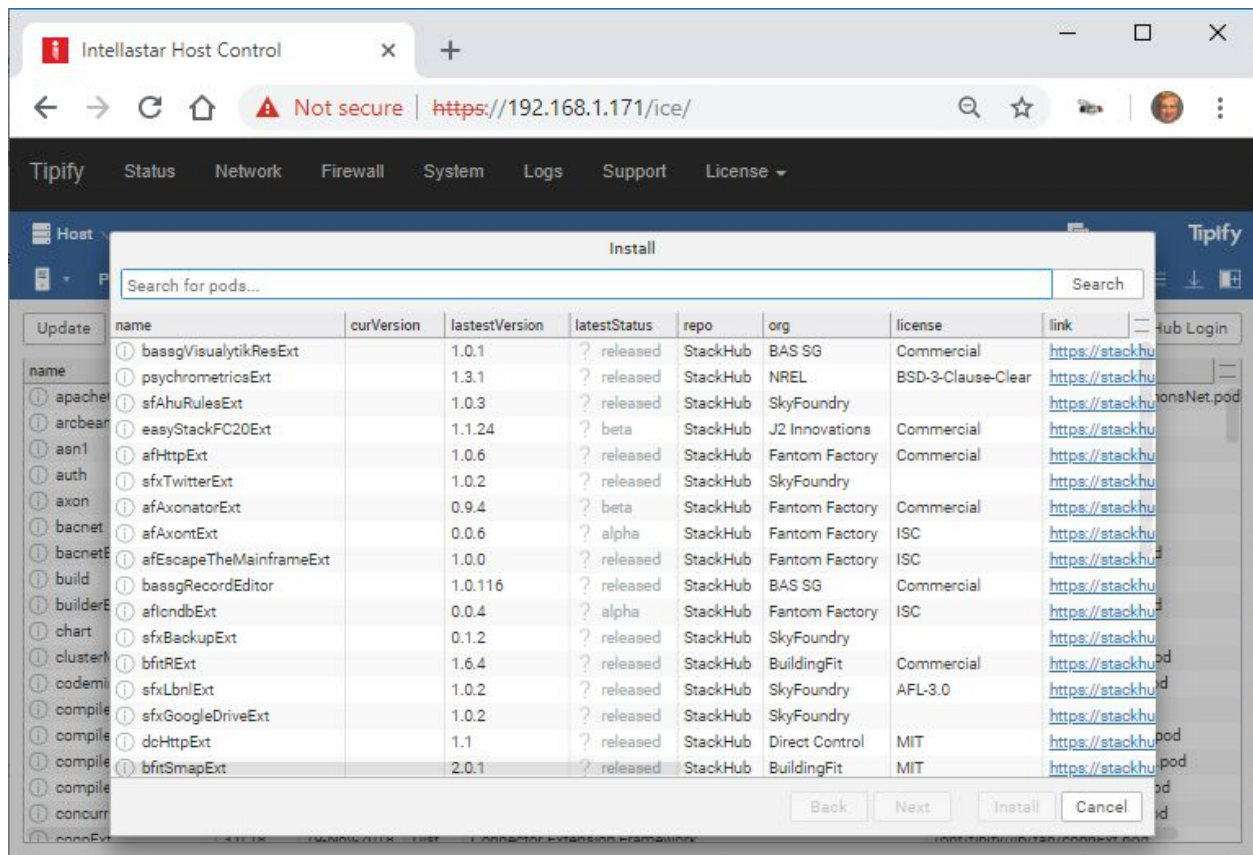
Update

Press to check for available updates.



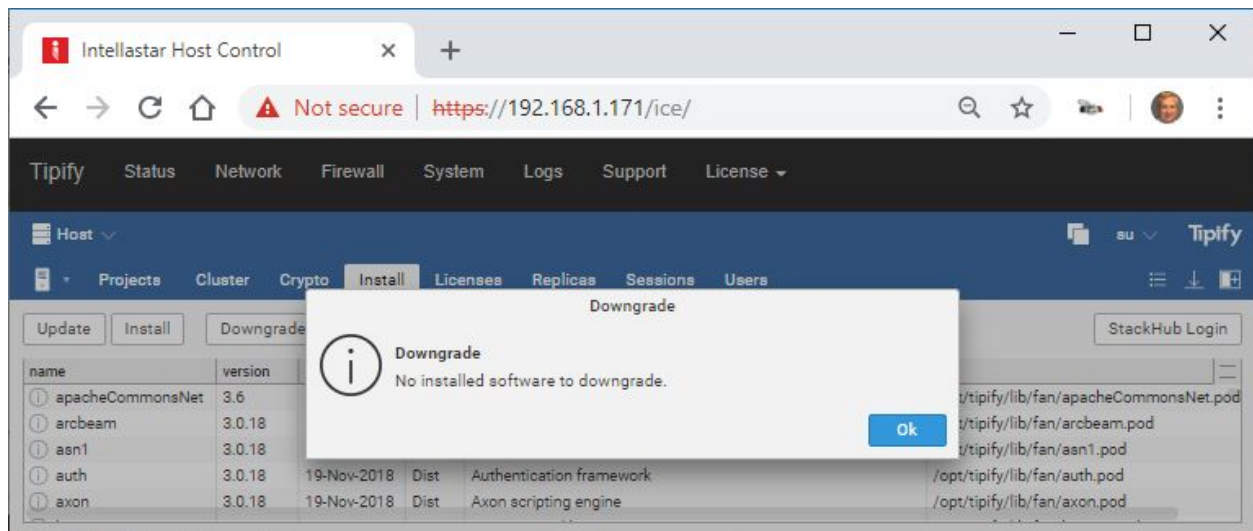
Install

Do a search for nothing and all available add-ons will show up.



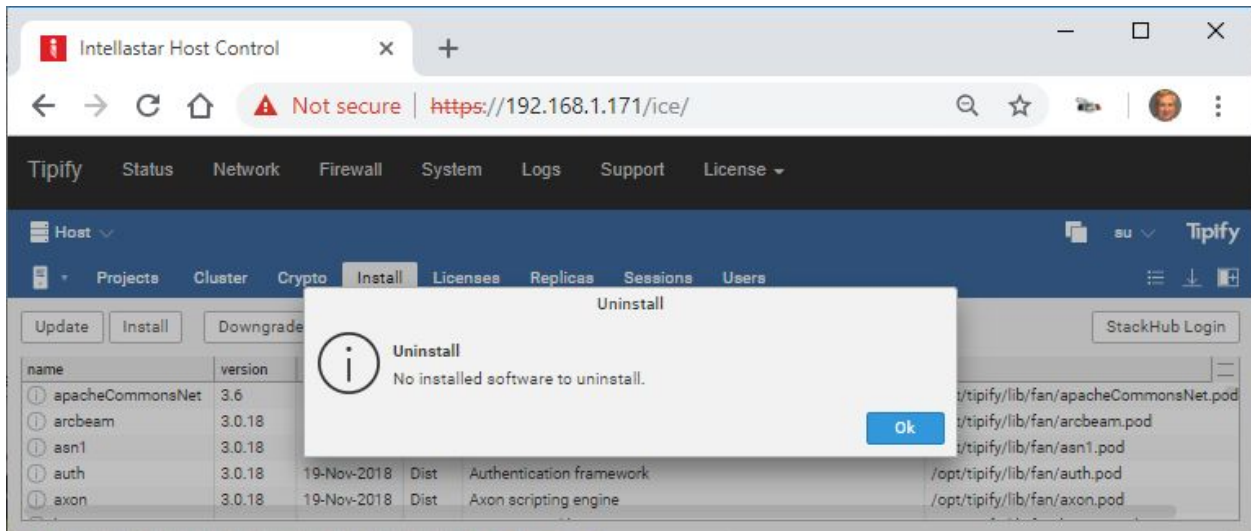
Downgrade

The new tool allows you to batch install, update, downgrade, and uninstall multiple pods at one time.



Uninstall

The new tool allows you to batch install, update, downgrade, and uninstall multiple pods at one time.



Licenses

Licenses provides access to license information and the ability to upload a license, update from Cloud or Uninstall.

Note: If you exceed your license limits, you must delete to within your limits and reboot to become operational again. You may have to perform this in Folio since the connectors are disabled.

Note: If you are removing/moving/adding licenses, then we would always suggest a restart. Also remember that changing your installed licenses will usually change your node's cluster nodelid. Also remember to stop using a license on machine A, before moving it machine B.

The screenshot shows the Intellastar Host Control web interface. The browser address bar indicates the URL is <https://192.168.1.176/ice/>. The interface has a dark blue header with the 'Tipify' logo and a navigation menu. The 'License' tab is selected, showing a table of installed licenses. A summary bar at the top of the license table indicates 'License OK: used 30 of 130' with a green progress bar.

id	licensee	err	product	vendor	org	subOrg	points	maintDue	expires	devOnly	features	weather	mod
① 2388198f-411e3642	Intellastar		T-Star	Intellastar	Intellastar		130				core,conn,analytics	vendor	27-Nov-2018 Tue

name	value
① features	analytics,conn,core
① licensee	Intellastar
① maintDue	
① points	130
① product	T-Star
① vendor	Intellastar
① weather	vendor

project	usage
① demo	30

Install

Install lets you paste license text or choose a license file.

Update

You can update your license from Cloud by pressing this button.

The screenshot shows the Intellastar Host Control web interface. The browser address bar shows the URL <https://192.168.1.171/ice/>. The interface has a navigation bar with links: Tipify, Status, Network, Firewall, System, Logs, Support, and License. Below this is a sub-navigation bar with links: Host, Projects, Cluster, Crypto, Install, Licenses (selected), Replicas, Sessions, and Users. The main content area shows a table of licenses. The table has columns: id, licensee, err, product, vendor, org, subOrg, points, maintDue, expires, devOnly, features, weather, and a final column with the value 2. The first row of data shows: id: 23788ace-28f1e80b, licensee: Intellastar, product: T-Star, vendor: Intellastar, org: Intellastar, points: 130, features: core,conn,analytics, weather: vendor. Below the table is a section titled 'Working...' with a sub-section 'Host info' showing details for the selected license. The details are organized into two columns: 'name' and 'value' on the left, and 'project' and 'usage' on the right. The 'name' column lists: features (analytics,conn,core), licensee (Intellastar), maintDue, points (130), product (T-Star), vendor (Intellastar), and weather (vendor). The 'project' column lists: d245GM2 (usage: 103) and demo (usage: 13).

id	licensee	err	product	vendor	org	subOrg	points	maintDue	expires	devOnly	features	weather	
23788ace-28f1e80b	Intellastar		T-Star	Intellastar	Intellastar		130				core,conn,analytics	vendor	2

name	value	project	usage
features	analytics,conn,core	d245GM2	103
licensee	Intellastar	demo	13
maintDue			
points	130		
product	T-Star		
vendor	Intellastar		
weather	vendor		

Uninstall

You can uninstall license.

Hostinfo

Hostinfo provides the following information about your device:

hostId: TSTAR-245G-M182901C9-DDF730B9

licProduct: @1fae495c-1cc2ec43 "T-Star"

model: 245L

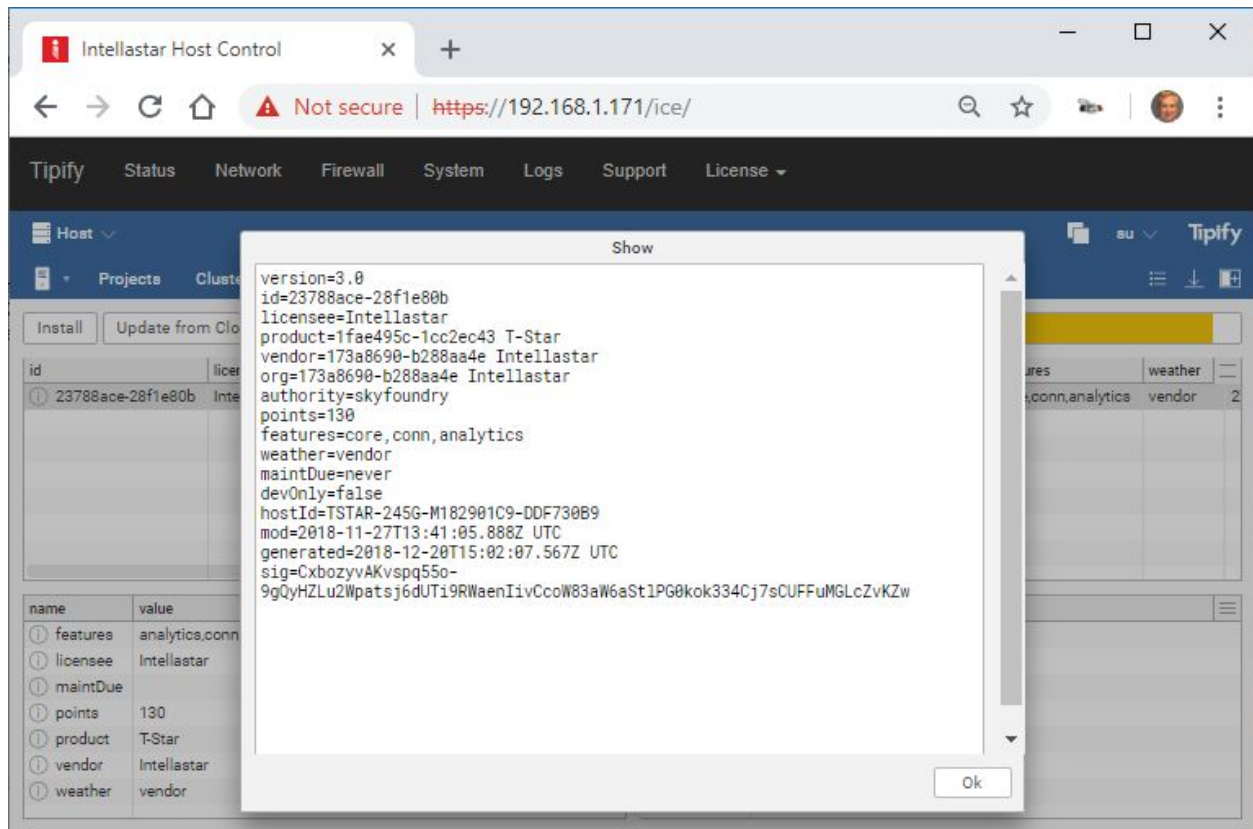
brand: Tipify

version: 3.0.18

today: 20-Dec-2018

Show

Shows an installed license.



EULA

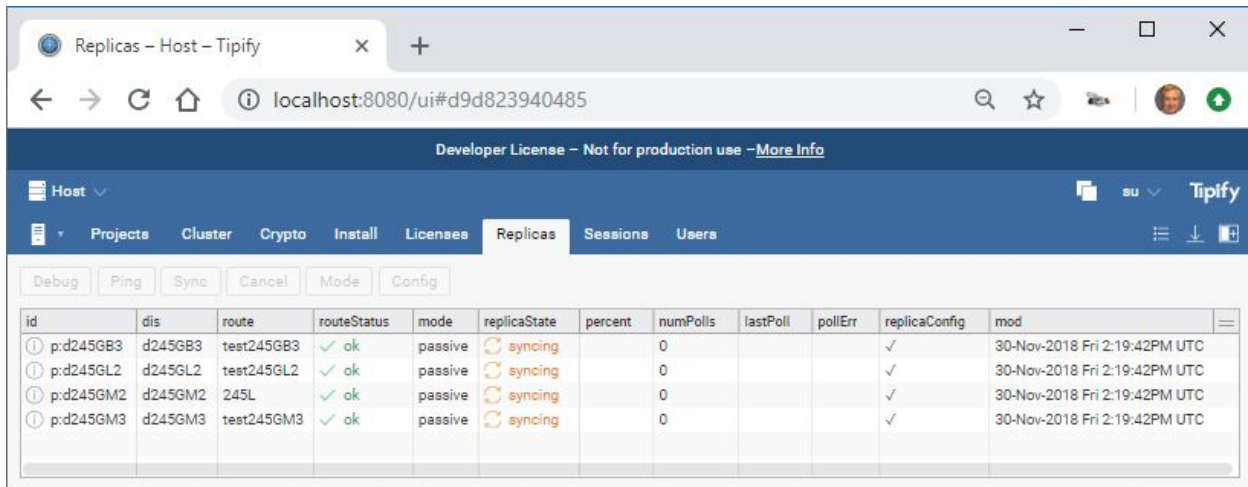
Shows your EULA.

Project Manager (coming in 3.0.6)

Provides the ability to delete projects in a device.

Replicas

Select replicas and press Sync. You must have created the replicas in the Projects tab.



Developer License – Not for production use – [More Info](#)

Host ▾

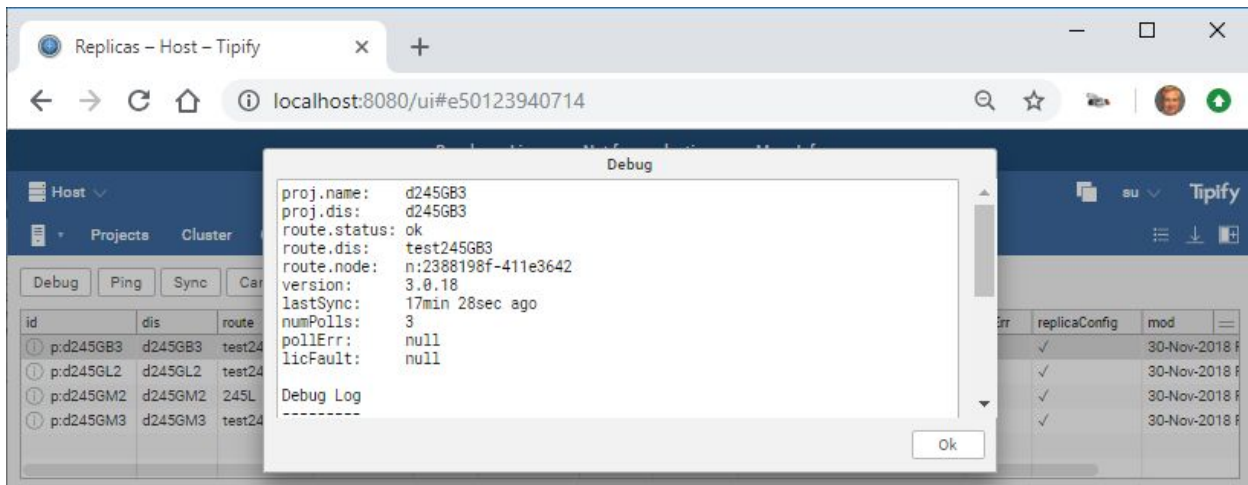
Projects Cluster Crypto Install Licenses **Replicas** Sessions Users

Debug Ping Sync Cancel Mode Config

id	dis	route	routeStatus	mode	replicaState	percent	numPolls	lastPoll	pollErr	replicaConfig	mod
① p:d245GB3	d245GB3	test245GB3	✓ ok	passive	syncing	0	0			✓	30-Nov-2018 Fri 2:19:42PM UTC
① p:d245GL2	d245GL2	test245GL2	✓ ok	passive	syncing	0	0			✓	30-Nov-2018 Fri 2:19:42PM UTC
① p:d245GM2	d245GM2	245L	✓ ok	passive	syncing	0	0			✓	30-Nov-2018 Fri 2:19:42PM UTC
① p:d245GM3	d245GM3	test245GM3	✓ ok	passive	syncing	0	0			✓	30-Nov-2018 Fri 2:19:42PM UTC

Debug

Debug provides debug information.



Replicas – Host – Tipify

localhost:8080/ui/#e50123940714

Host ▾

Projects Cluster

Debug Ping Sync Can

id	dis	route
① p:d245GB3	d245GB3	test24
① p:d245GL2	d245GL2	test24
① p:d245GM2	d245GM2	245L
① p:d245GM3	d245GM3	test24

Debug

```

proj.name: d245GB3
proj.dis: d245GB3
route.status: ok
route.dis: test245GB3
route.node: n:2388198f-411e3642
version: 3.0.18
lastSync: 17min 28sec ago
numPolls: 3
pollErr: null
licFault: null
Debug Log
-----

```

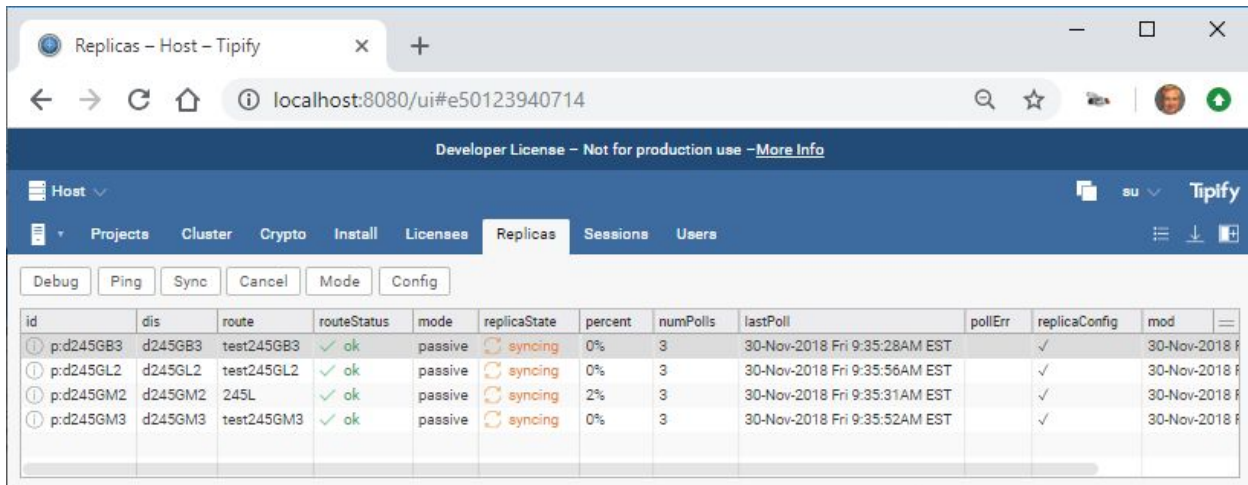
Ok

Ping

Select replicas and press Ping to check access.

Sync

Select replicas and press Sync to initiate Sync.



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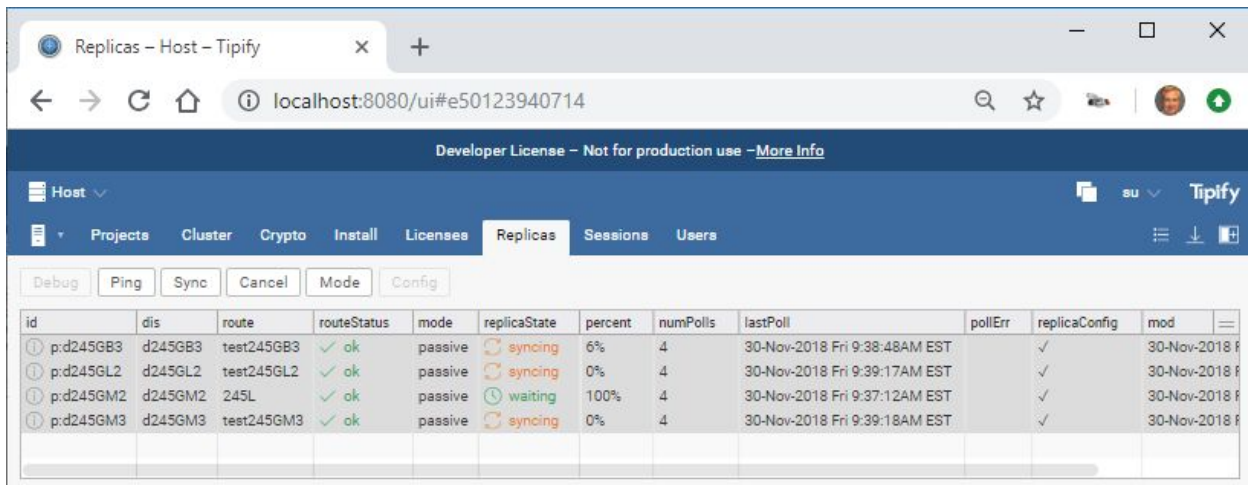
Host ▾ su ▾ Tipify

Projects Cluster Crypto Install Licenses **Replicas** Sessions Users

Debug Ping Sync Cancel Mode Config

id	dis	route	routeStatus	mode	replicaState	percent	numPolls	lastPoll	pollErr	replicaConfig	mod	
① p:d245GB3	d245GB3	test245GB3	✓ ok	passive	syncing	0%	3	30-Nov-2018 Fri 9:35:28AM EST		✓	30-Nov-2018	
① p:d245GL2	d245GL2	test245GL2	✓ ok	passive	syncing	0%	3	30-Nov-2018 Fri 9:35:56AM EST		✓	30-Nov-2018	
① p:d245GM2	d245GM2	245L	✓ ok	passive	syncing	2%	3	30-Nov-2018 Fri 9:35:31AM EST		✓	30-Nov-2018	
① p:d245GM3	d245GM3	test245GM3	✓ ok	passive	syncing	0%	3	30-Nov-2018 Fri 9:35:52AM EST		✓	30-Nov-2018	

It will go to waiting state when sync is complete.



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Host ▾ su ▾ Tipify

Projects Cluster Crypto Install Licenses **Replicas** Sessions Users

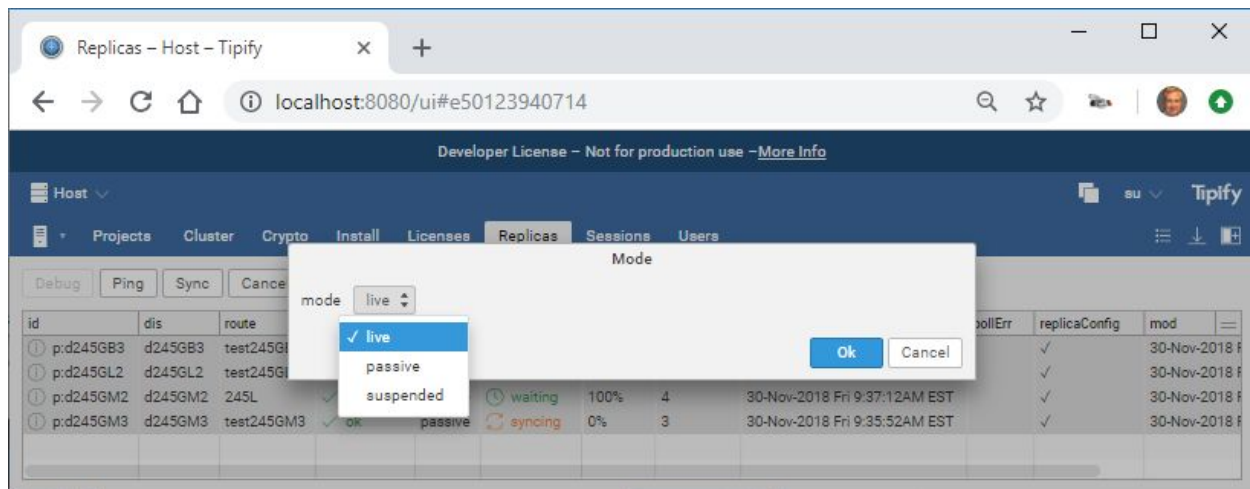
Debug Ping Sync Cancel Mode Config

id	dis	route	routeStatus	mode	replicaState	percent	numPolls	lastPoll	pollErr	replicaConfig	mod	
① p:d245GB3	d245GB3	test245GB3	✓ ok	passive	syncing	6%	4	30-Nov-2018 Fri 9:38:48AM EST		✓	30-Nov-2018	
① p:d245GL2	d245GL2	test245GL2	✓ ok	passive	syncing	0%	4	30-Nov-2018 Fri 9:39:17AM EST		✓	30-Nov-2018	
① p:d245GM2	d245GM2	245L	✓ ok	passive	waiting	100%	4	30-Nov-2018 Fri 9:37:12AM EST		✓	30-Nov-2018	
① p:d245GM3	d245GM3	test245GM3	✓ ok	passive	syncing	0%	4	30-Nov-2018 Fri 9:39:18AM EST		✓	30-Nov-2018	

Cancel

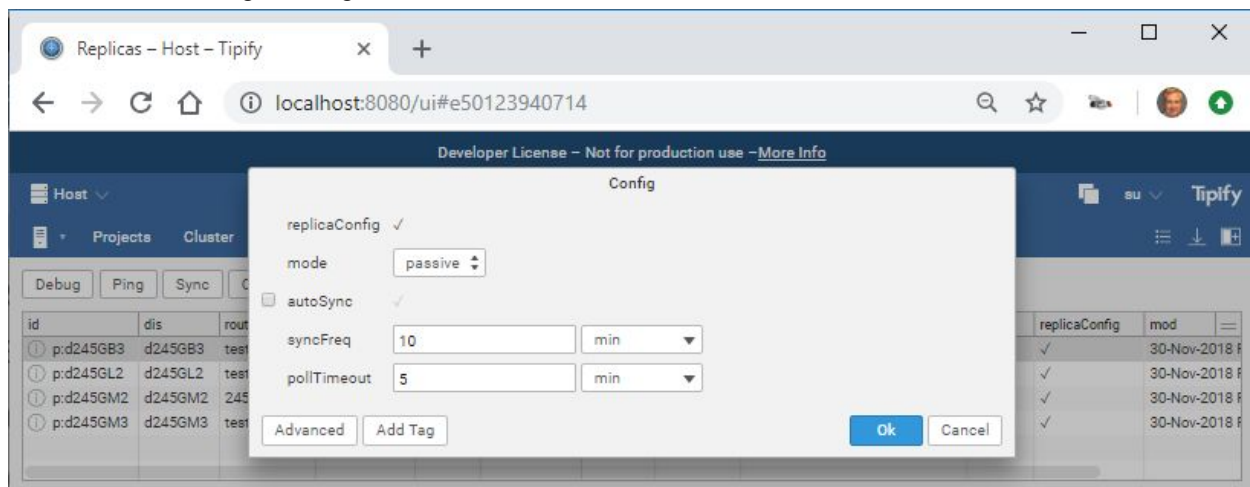
Mode

Mode lets you choose live, passive or suspended.



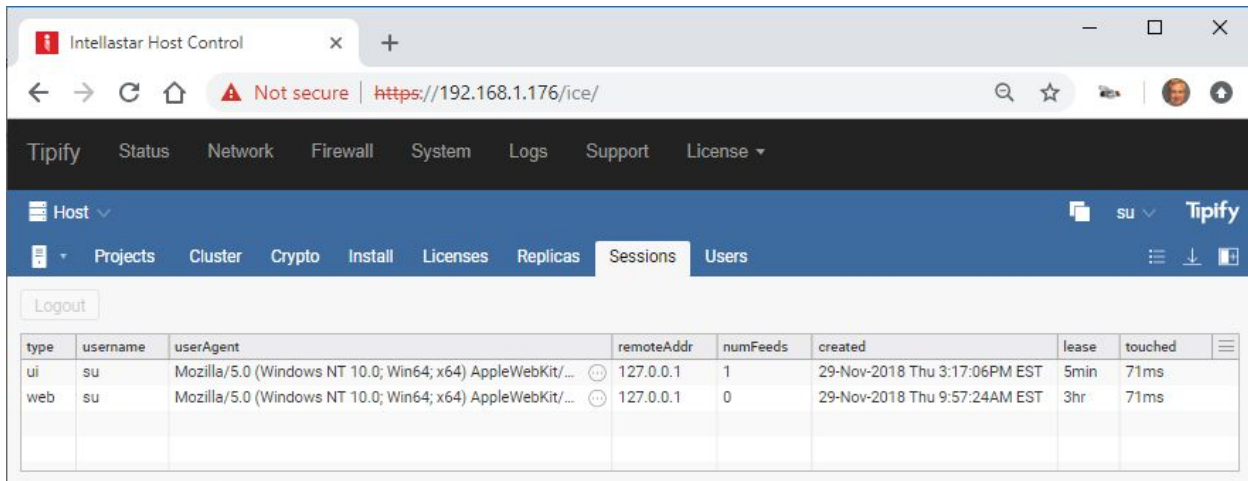
Config

You can set or change Config.



Sessions

Provides a list of sessions.

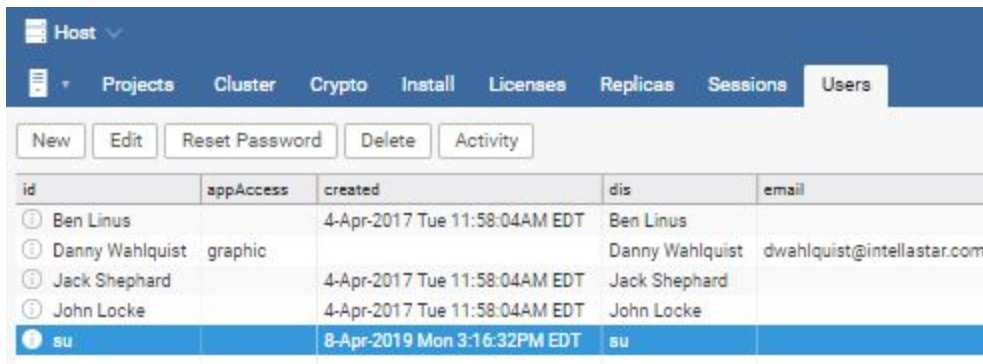


The screenshot shows the Tipify Host Control web interface. The browser address bar indicates a 'Not secure' connection to <https://192.168.1.176/ice/>. The interface has a dark blue header with navigation links: Tipify, Status, Network, Firewall, System, Logs, Support, and License. Below this is a blue sidebar with a 'Host' dropdown and a list of tabs: Projects, Cluster, Crypto, Install, Licenses, Replicas, Sessions (selected), and Users. A 'Logout' button is visible. The main content area displays a table of active sessions.

type	username	userAgent	remoteAddr	numFeeds	created	lease	touched	
ui	su	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/...	127.0.0.1	1	29-Nov-2018 Thu 3:17:06PM EST	5min	71ms	
web	su	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/...	127.0.0.1	0	29-Nov-2018 Thu 9:57:24AM EST	3hr	71ms	

Users

Provides access to User Manager.

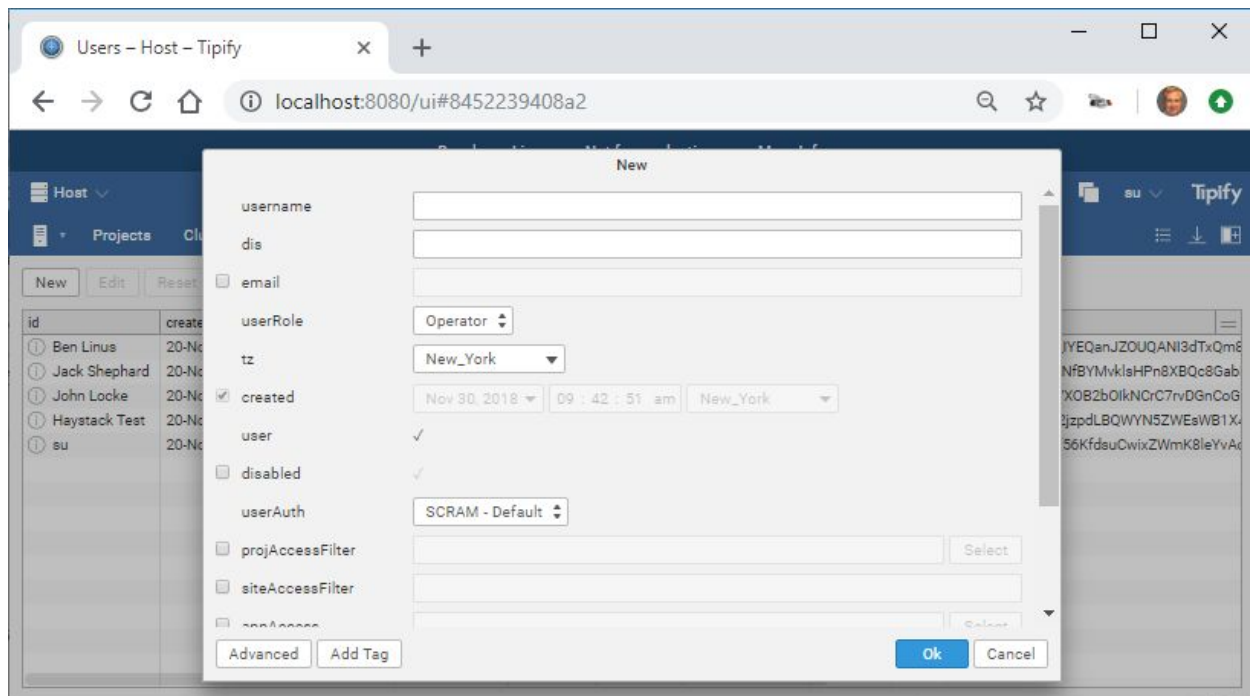


The screenshot shows the 'Users' tab in the Tipify Host Control interface. The sidebar is the same as the previous screenshot, but the 'Users' tab is selected. Above the table are buttons for 'New', 'Edit', 'Reset Password', 'Delete', and 'Activity'. The table lists existing users.

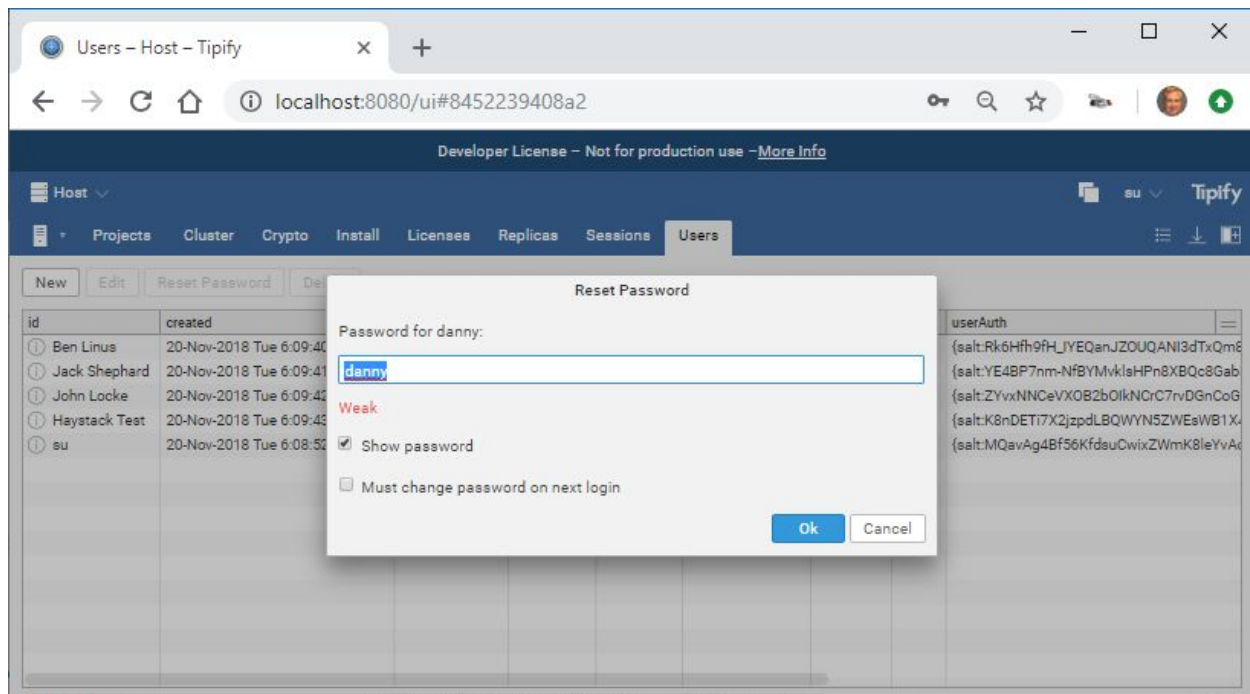
id	appAccess	created	dis	email
Ben Linus		4-Apr-2017 Tue 11:58:04AM EDT	Ben Linus	
Danny Wahlquist	graphic	4-Apr-2017 Tue 11:58:04AM EDT	Danny Wahlquist	dwahlquist@intellastar.com
Jack Shephard		4-Apr-2017 Tue 11:58:04AM EDT	Jack Shephard	
John Locke		4-Apr-2017 Tue 11:58:04AM EDT	John Locke	
su		8-Apr-2019 Mon 3:16:32PM EDT	su	

New

Press New to create a new user.

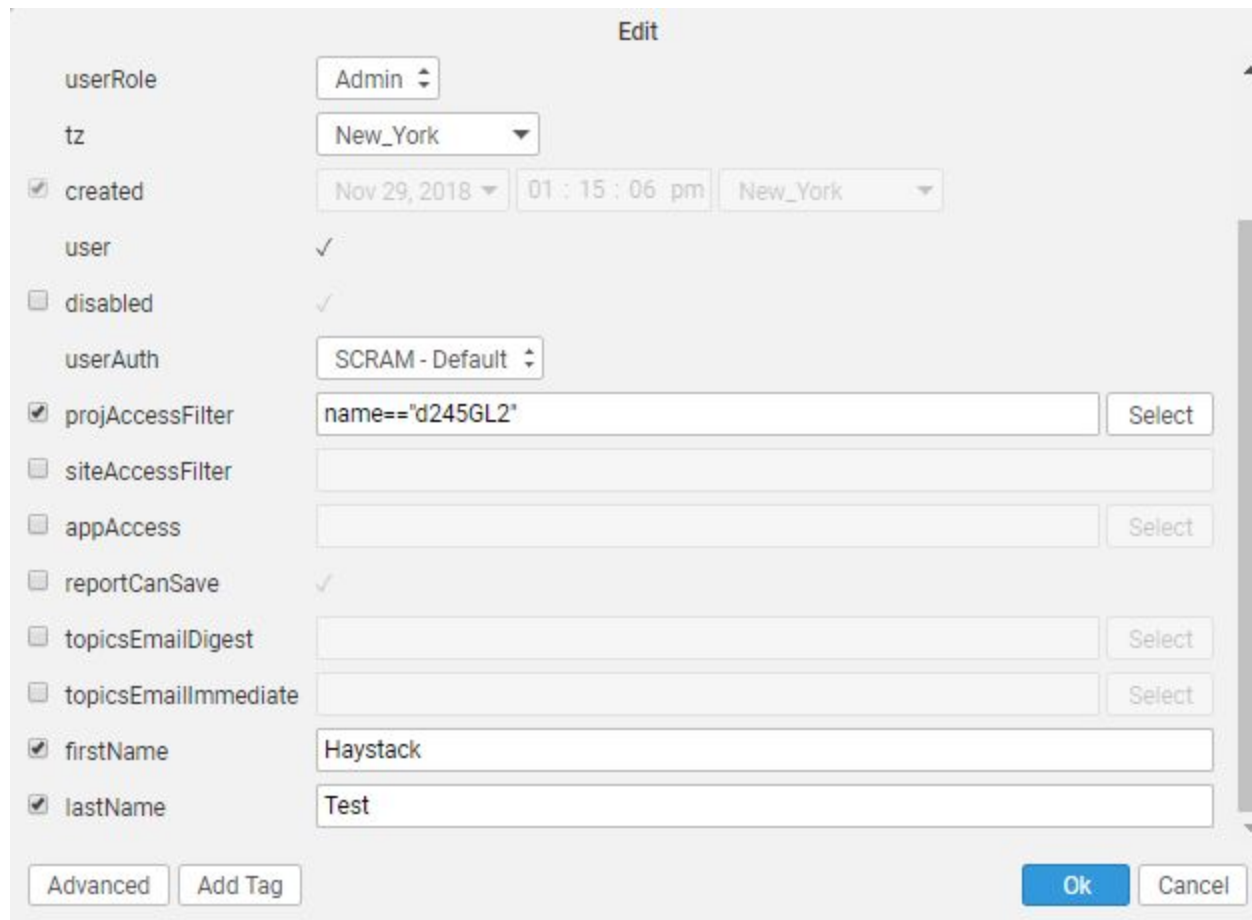


Once complete, press OK and enter password.



Edit

Press Edit to change an existing user.



The image shows a web form titled "Edit" for modifying a user. The form contains several fields and checkboxes. The "userRole" field is a dropdown menu set to "Admin". The "tz" field is a dropdown menu set to "New_York". The "created" field has three sub-fields: a date dropdown set to "Nov 29, 2018", a time dropdown set to "01 : 15 : 06 pm", and a time zone dropdown set to "New_York". The "user" field has a checkmark icon. The "disabled" field has a checkmark icon. The "userAuth" field is a dropdown menu set to "SCRAM - Default". The "projAccessFilter" field has a text input containing "name==\"d245GL2\"" and a "Select" button. The "siteAccessFilter" field has an empty text input. The "appAccess" field has an empty text input and a "Select" button. The "reportCanSave" field has a checkmark icon. The "topicsEmailDigest" field has an empty text input and a "Select" button. The "topicsEmailImmediate" field has an empty text input and a "Select" button. The "firstName" field has a text input containing "Haystack". The "lastName" field has a text input containing "Test". At the bottom of the form, there are three buttons: "Advanced", "Add Tag", and "Ok", followed by a "Cancel" button.

userRole	Admin
tz	New_York
created	Nov 29, 2018 01 : 15 : 06 pm New_York
user	✓
disabled	✓
userAuth	SCRAM - Default
projAccessFilter	name=="d245GL2" [Select]
siteAccessFilter	[Empty]
appAccess	[Empty] [Select]
reportCanSave	✓
topicsEmailDigest	[Empty] [Select]
topicsEmailImmediate	[Empty] [Select]
firstName	Haystack
lastName	Test

[Advanced] [Add Tag] [Ok] [Cancel]

projAccessFilter

By default a user in the user database has access to all the projects running within the cluster. You can restrict access to specific projects by applying the [projAccessFilter](#) tag to the user. The filter is applied against the project's [projMeta](#) tag:

```
projAccessFilter: name=="demo"    // only provide access to demo
projAccessFilter: eastCoast       // any project with eastCoast in projMeta
```

topicsEmailDigest and topicsEmailImmediate

Topic subscription tags [topicsEmailDigest](#) and [topicsEmailImmediate](#) must use absolute project ids.

Reset Password

You can reset a user's password.

Delete

You can delete a user.

Activity

You can view activity of a user beginning in 3.0.19.

The screenshot shows the 'Users' tab in the Tipify application. A modal window displays the activity log for the user 'su'. The activity log table has columns: ts, activity, changes, remoteAddr, and userAgent.

ts	activity	changes	remoteAddr	userAgent
8-May-2019 Wed 9:12:26AM EDT	login		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 9:13:15AM EDT	login		192.168.1.152	SkyArc/3.0.20
8-May-2019 Wed 9:13:19AM EDT	login		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 9:13:24AM EDT	login		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 9:14:26AM EDT	login		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 9:15:16AM EDT	login		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 9:16:06AM EDT	login		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 9:16:55AM EDT	login		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 9:57:13AM EDT	logout		127.0.0.1	Mozilla/5.0 (Windows NT 10.0; Win64; x64)
8-May-2019 Wed 10:07:49AM EDT	logout		127.0.0.1	Mozilla/5.0 (Windows NT 10.0; Win64; x64)
8-May-2019 Wed 10:11:25AM EDT	logout		127.0.0.1	Mozilla/5.0 (Windows NT 10.0; Win64; x64)
8-May-2019 Wed 12:12:36PM EDT	logout		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 12:13:31PM EDT	logout		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 12:14:31PM EDT	logout		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 12:15:22PM EDT	logout		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 12:16:10PM EDT	logout		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 12:17:01PM EDT	logout		127.0.0.1	SkyArc/3.0.20
8-May-2019 Wed 12:41:55PM EDT	logout		192.168.1.152	SkyArc/3.0.20
8-May-2019 Wed 12:41:55PM EDT	logout		127.0.0.1	SkyArc/3.0.20

Reference

The reference information is on your device or server via the Doc app or searchable online at

<https://skyfoundry.com/doc/>.