HCL Sametime Meetings 11.5
+ Upgrade form 11.5 Pre-Release
Deployment on Docker
Step by Step

Ver. 1.0

ALEŠ LICHTENBERG
HCL Ambassador

twitter: @a_lichtenberg
blog: www.alichtenberg.cz
The document does not replace official documentation.

The implementation will be demonstrated on a specific example.

The document will be gradually supplemented and updated.

Thank you for the practical installation advice:

Daniel Nashed – HCL Lifetime Ambassador : blog.nashcom.de
Roberto Boccadoro – HCL Ambassador : www.robertoboccadoro.com
About author

I am a technical consultant of HCL Digital Solutions software: Domino/Notes, Sametime, Nomad, Verse. I am a Member of Czech Lotus User Group = Sutol. I am a Blogger and a Speaker. I have been primarily engaged in the Lotus software family since 1994. I remember the era when these products were owned by Lotus, then IBM, and now I am looking forward to another successful years with HCL Software.

Contacts:
e-mail: ales@alichtenberg.cz
twitter: a_lichtenberg
blog: alichtenberg.cz
Agenda

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- Step 8 - Upgrade HCL Sametime Meetings V11.5 Pre-Release to 11.5 Premium
HCL Sametime V11.x – Resources

Current resources:

➢ Installation and Administration Guide
   https://help.hcltechsw.com/sametime/11.5/admin/administrator_doc.html

➢ Installing & Configuring CentOS (for Domino)
   https://www.slideshare.net/defaultxsp/installing-configuring-ibm-domino-9-on-centos

➢ HCL Customer Support
   https://hclpnsupport.hcltech.com/csm

➢ Knowledge DB
   https://hclpnsupport.hcltech.com/csm?id=search&spa=1&t=kb&q=sametime%20v11

➢ Discussion HCL Sametime
   https://hclpnsupport.hcltech.com/community?id=community_forum&sys_id=e3c946d01b80841077761fc58d4bcb04
Pilot example

This procedure builds on my previous Sametime V11.x installation guide. The prerequisite is already implemented Sametime 11.5

Installation manual “HCL Sametime V11.0 – Step by step”:

And next manual: „Upgrade HCL Sametime server 11.0 to 11.5“:
https://www2.slideshare.net/AleLichtenberg/upgrade-hcl-sametime-server-110-to-115

Deployment HCL Sametime Meetings 11.5 Release will take place on Linux Centos 7.4

Installed components:
• Docker for HCL Sametime Meetings 11.5 Release
• HCL Sametime Meetings 11.5

All components will be installed on one virtual machine.
Hardware required for this Pilot Example Deployment

Hardware:
✓ 8 core, 32 GB RAM, 80 GB Hard disk

Operation system:
✓ Centos 7.4.

Pre-Requisites
• Docker for HCL Sametime Meetings 11.5
• HCL Sametime Meetings 11.5

✓ FQDN for my Pilot example server: „meetings.kaiser.cz“
Installation Packages

- **What we need to install:** A HCL Sametime Meetings 11.5

![Installation Packages](image)
Step 1

Installation and configuration
Linux Centos 7.4
Installation Centos 7.4

Currently, HCL Sametime Meetings 11.5 is only supported for Docker running on Linux

For Centos installation 7.4. you can use part of a great step-by-step manual by David Olson:
https://www.slideshare.net/defaultxsp/installing-configuring-ibm-domino-9-on-centos
Step 2

Installation

Docker

for

HCL Sametime Meetings 11.5
Installation Docker for HCL Sametime Meetings 11.5

What is Docker?

Docker is an open-source lightweight containerization technology. It allows you to automate the deployment of applications in lightweight and portable containers and ship it all out as one package. It also allows you to run multiple Operating systems on the same host.

How to install Docker Engine: https://docs.docker.com/engine/install/centos
How to install Docker Compose: https://docs.docker.com/compose/install
Installation Docker for HCL Sametime Meetings 11.5

- Log in with your Centos server as "root" user and execute all commands under this user.
- Run the following commands for installation required Docker Engine packages:

  ```
  yum install -y net-tools wget yum-utils device-mapper-persistent-data lvm2
  ```
Installation Docker for HCL Sametime Meetings 11.5

• Now run the following commands for add the docker repository for software downloads:

```
yum-config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo
```
• Install the latest version of Docker Engine and containerd:
  
  ```bash
  yum install -y docker-ce docker-ce-cli containerd.io
  ```
Installation Docker for HCL Sametime Meetings 11.5

- you can allow this host to forward/route IP traffic and restart the network

echo net.ipv4.ip_forward=1 >> /etc/sysctl.conf

systemctl restart network
Installation Docker for HCL Sametime Meetings 11.5

- Use the command for start the Docker Service
  `systemctl start docker`

- Use the command for enable Docker auto start
  `systemctl enable docker`
Installation Docker for HCL Sametime Meetings 11.5

- Verify that Docker Engine is installed correctly by running the hello-world image.

```
docker run hello-world
```
Now install Docker Compose on Linux systems

curl -L "https://github.com/docker/compose/releases/download/1.26.2/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
Installation Docker for HCL Sametime Meetings 11.5

- Apply executable permissions to the binary:

  `chmod +x /usr/local/bin/docker-compose`
Installation Docker for HCL Sametime Meetings 11.5

• You can check the installed Docker component
  `docker info`
  `docker-compose --version`
DONE!

Installation Docker for HCL Sametime Meetings 11.5
Step 3

Installation
HCL Sametime Meetings 11.5
To Docker
We will now install Pre-release HCL Sametime Meeting V11.5. into to Docker.
You will need to edit the configuration files, and because it works well with Midnight Commander, I installed it with Centos:
\texttt{yum install mc}
After installation start Midnight Commander \texttt{mc}
Installation HCL Sametime Meetings 11.5

- Download HCL Sametime Meetings 11.5 file from Flexnet and copy this file for my example to directory `/opt/ST-115-Meet`
- Extract the zip file `Sametime_11.5_MeetingServer.zip`:

  ```
  unzip Sametime_11.5_MeetingServer.zip
  ```

- If you do not have `unzip` available, install using:

  ```
  yum install unzip
  ```
Installation HCL Sametime Meetings 11.5 to Docker

- After extract Sametime_11.5_MeetingServer.zip file run the below command to load and initialize the docker images in the directory where you have extracted the zip file and

  ```
  ./install.sh
  ```
Installation HCL Sametime Meetings 11.5 to Docker

- **Note**: The Sametime Meetings 11.5 requires access to a MongoDB server. You can re-use the existing MongoDB server that is being used by the Community and Proxy servers or you can deploy one specifically for Meetings.

There are no special configuration steps required for the Meeting database. It automatically creates when the Sametime Meeting Server connects to MongoDB.

- specify the appropriate values for the deployment. For example:

```
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Enter Proxy Server Host name or IP address: sametime1.kaiser.cz
Enter Proxy Server Port [443]: 443
Enter fully qualified Server Name: meetings.kaiser.cz
Enter Server Domain Name [kaiser.cz]:
Enter Mongo Host [sametime1.kaiser.cz]: sametime1.kaiser.cz
Enter Mongo Port [27017]: 27017
Enter Mongo Admin User Name: sametimeUser
Enter Mongo Admin User Password:
```
Installation HCL Sametime Meetings 11.5 to Docker

- Confirm with the „Enter“ key („Enter the Base64 Encoded JWT_SECRET…..)
Installation HCL Sametime Meetings 11.5 to Docker

- Installation progress
Installation HCL Sametime Meetings 11.5 to Docker

• The install.sh script will load and run the following list of docker images.
  - meetings-auth.node
  - meetings-recordings.node
  - meetings-web
  - meetings-prosody
  - meetings-jicofo
  - meetings-jvb
  - meetings-jigasi
  - meetings-jibri
Installation HCL Sametime Meetings 11.5 to Docker

- After installation run the below command for check if meetings server is running.
  Show all the loaded docker images

```
docker images
```

![Image showing docker images output]

```
Loaded image: sametime-docker-prod.artifactory.cpmp-hol.com/meetings-recordings.node:20201105-2027
```

![Image showing docker images output]

```
Loaded image: 30
```

![Image showing docker images output]
Installation HCL Sametime Meetings 11.5 to Docker

- After installation run the below command for list all running containers in docker engine: `docker ps`
Installation HCL Sametime Meetings 11.5 to Docker

- Try url: https://meetings.kaiser.cz (for my example)
- Use Google Chrome
DONE!

Installation HCL Sametime Meetings 11.5 to Docker
Step 4

Enable Sametime Community for HCL Sametime Meetings 11.5
Enable HCL Sametime Community for Meetings

• HCL Sametime Community 11.5 requires the following changes to support Sametime Meetings:
  - Enable Sametime Meeting Policy
  - Enable Windows Sametime Community server to support Meetings
  - Create JWT Configuration
Enable HCL Sametime Community for Meetings

- Open your HCL Sametime Community server
- Edit the `polices.user.xml` found in the Sametime Community server install directory.
Enable HCL Sametime Community for Meetings

- Locate the `im.meetingsEnabled` parameter under `im` and set this to a value of 1. This policy can be enabled for anonymous and any additional policies that may exist.
- Save this file
Enable HCL Sametime Community for Meetings

• Open your Centos server
• Create JWT Configuration:

  • Copy the value of **JWT_APP_SECRET** from the `.env` file.
  • Run the following command from the Linux shell with this JWT_APP_SECRET value:
    `echo -n <JWT_APP_SECRET> | base64 -w 0`

    The value (output) from this command becomes the "GENERATED_SECRET" for the `sametime.ini` and `stproxyconfig.xml` in the following steps.
Enable HCL Sametime Community for Meetings
Enable HCL Sametime Community for Meetings
Enable HCL Sametime Community for Meetings

• Open your HCL Sametime Community server
• Edit the `sametime.ini` found in the Sametime Community server install directory.
Enable HCL Sametime Community for Meetings

- Add the following under [config]:
  JWT_SECRET=GENERATED_SECRET
- Change the following under [st-bb-names]:
  ST_AUTH_TOKEN=notes To: ST_AUTH_TOKEN=Fork:Jwt,notes
Enable HCL Sametime Community for Meetings

- Open your HCL Sametime Proxy server
- On the Sametime Proxy server in the conf folder, edit the `stproxyconfig.xml` file
Enable HCL Sametime Community for Meetings

- adding <jwtSecret> and <refreshJwt> settings within <configuration> like so:

```xml
<configuration>
  ...
  <jwtSecret>
    GENERATED_SECRET
  </jwtSecret>
  <refreshJwt>
    <enabled>true</enabled>
    <path>/meeting-auth/api/v1/refresh</path>
  </refreshJwt>
</configuration>
```
DONE!

Enable HCL Sametime Community for Meetings
Step 5

Enable Sametime Proxy for HCL Sametime Meetings 11.5
Enable HCL Sametime Community for Meetings

• Open your HCL Sametime Proxy server
• On the Sametime Proxy server in the conf folder, edit the stproxyconfig.xml file
Enable HCL Sametime Proxy for Meetings

• Edit stproxyconfig.xml in the Proxy server's conf directory, add the following

```xml
<meeting>
  <host>HOST</host>
  <port>PORT</port>
  <isSecure>true</isSecure>
</meeting>
...
Enable HCL Sametime Proxy for Meetings

- Now restart HCL Community server or all HCL Domino server and HCL Sametime Proxy server
DONE!

Enable HCL Sametime Proxy for Meetings
Step 6

Test

HCL Sametime Meetings 11.5
Test HCL Sametime Meetings 11.5

• For example: Open Google Chrome browser and login to HCL Sametime Chat
Test HCL Sametime Meetings 11.5

- Open „Meetings“ and „Sametime Meetings“
Test HCL Sametime Meetings 11.5

• Enter Name for new Meeting and click to „START“ or open „Recent Meetings“
Test HCL Sametime Meetings 11.5

- You can now start testing
HCL Sametime Meetings 11.5
Deployment on Docker
Step by Step

The END
Step 7

Updating the Sametime Meeting Server TLS Certificates
Updating the Sametime Meeting Server TLS Certificates

• The Sametime Meeting Server is pre-configured with a self-signed certificate. Use these instructions to replace the self-signed certificate with a third party certificate.

• Docker compose down by command: `docker-compose down`
• Replace the cert and key files in `<install dir>./jitsi-config/web/keys/cert.crt and cert.key` with the correct key and crt file.
• Docker compose up –d by command: `docker-compose up -d`
DONE!

Updated the Sametime Meeting Server TLS Certificates
Step 8

Upgrade
HCL Sametime Meetings V11.5 Pre-Release
To
V11.5 Release (November 2020)
Note: The Sametime Meetings release requires access to a MongoDB server. You can re-use the existing MongoDB server that is being used by the Community and Proxy servers or you can deploy one specifically for Meetings.

There are no special configuration steps required for the Meeting database. It automatically creates when the Sametime Meeting Server connects to MongoDB.
In /opt/STMeetingserver stop the Sametime Meeting Server. For example: My folder with ST Meetings is „ST-115-Meet“
• Run the commands: **docker-compose down**
Upgrade HCL Sametime Meetings V11.5 Pre-Release to Release 11.5

- Rename your /opt/STMeetingServer to a backup.
- Run the commands: `mv /opt/ST-115-Meet /opt/STMeetingServer_bak`
Upgrade HCL Sametime Meetings V11.5 Pre-Release to Release 11.5

• Download HCL Sametime Meetings 11.5 file from Flexnet and copy this file for my example to directory `/opt/install/ST-115-Meet`
• Extract the zip file Sametime_11.5_MeetingServer.zip:

`unzip Sametime_PreRelase_11.5_MeetingServer.zip`
Run the install.sh script and follow the prompts to provide the information as required. You can copy the encoded secret from sametime.ini or create a new one with this update.

**Note:** If you create a new key, you must go through the configuration again according to the "Enable HCL Sametime Community for Meetings" section of this guide.

Run the commands for install: `/install.sh`
Upgrade HCL Sametime Meetings V11.5 Pre-Release to Release 11.5

- Fill in the data as needed and your existing meeting server installation.
- I copied the already created key so that I would not have to reconfigure everything and save additional time.
After a successful installation, the Meeting server starts automatically.
DONE!

HCL Meetings server is upgrade to release 11.5