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**HARTING HAIC MICA Debian Jessie Container v1.1.1\_r**

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This application note explains how to use the Debian Jessie Container v1.1.1\_r.



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## 1 Debian Jessie Container Basics

### 1.1 Overview

The Debian Jessie Container is based on Debian version 8.2.

It is intended for proof-of concept and not for application in the productive field.

Web Icons App.png and Header.png can be found under /META/web\_icons. In case new Web Container Icons are desired one can simply replace these files.

The Debian Jessie container contains apt-get as a package management system.

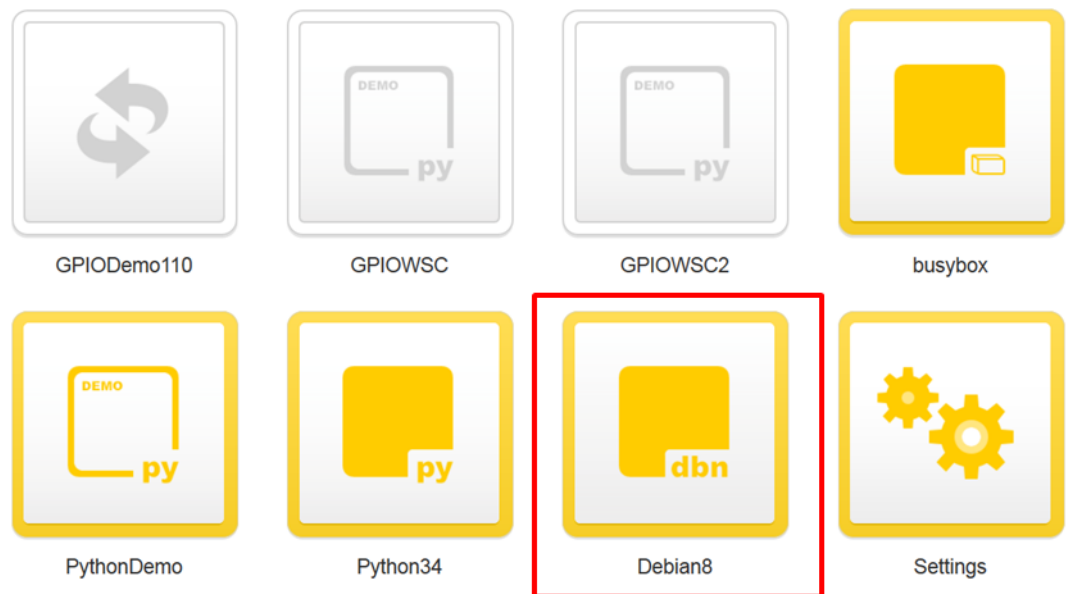


Figure 1: MICA Homescreen Including a Highlighted Debian Container

## 1.2 Installation

The installation and configuration routine of the Debian Jessie Container follows the standard routine as provided by the IIC MICA and can be found in the “MICA Programming Guide”.

Connect your MICA to a webbrowser of your choice

Using Windows, you can access your MICA via `https://devicename`

If your host is running an mdns application, you can access your MICA also via `https://devicename.local`.

You have to accept a Security Certificate. After Container installation, you have to configure network settings via Firmware -> Settings -> Network in order to access the Container via SSH.

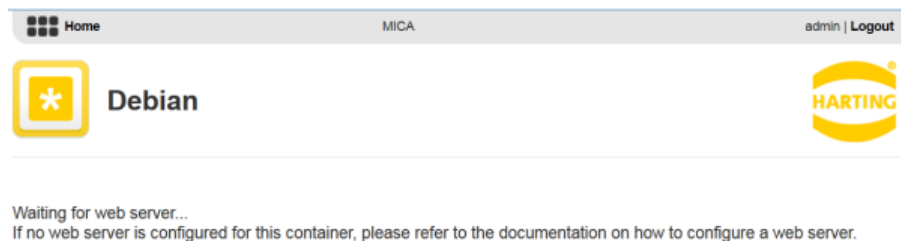
## 2 Use of the Debian Jessie Container

The Debian Jessie container can be accessed over ssh using e.g. Putty. The user name and password is root/root. You can then use Debian Jessie and pip.

When you start the container WebGUI, you see the following:

Waiting for web server...  
If no web server is configured for this container, please refer to the documentation on how to configure a web server.

Open the Debian Jessie Container with a left mouse click. You will see the following message:



**Figure 2: Debian Basis Container WebGUI**

It means you need to configure a webserver (in this example lighttpd) to create a WebGUI.

First, connect the container to the internet. Access the container over WinSCP. Create or edit a file `/etc/resolv.conf`. Enter here the ip-addresses of your name servers to allow domain name resolution. The file should look e.g. like this:

```
nameserver 192.168.178.1
nameserver 8.8.8.8
```

If there is an access over proxy: Create a file

`/etc/apt/apt.conf.d/99proxy` with the content

```
Acquire::http { Proxy "http://<proxy-ip-address>"; };
```

Access the container over Putty.

Then change into the `/var/` directory and install lighttpd:

```
apt-get install lighttpd
```

Confirm requests for additional disk space with yes.

If some archives haven't been fetched, run

```
apt-get update
```

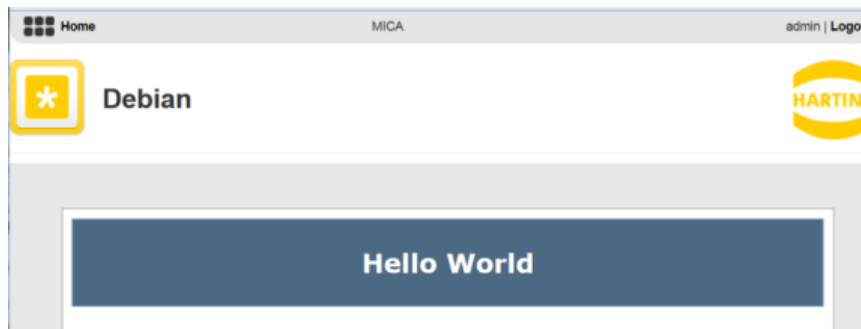
then rerun

```
apt-get install lighttpd.
```

A new directory has been created in var with a new file:

```
/var/www/index.lighttpd.html
```

The file `index.lighttpd.html` can be modified to create a WebGUI. You can import css style files from the directory `/var/www/css` in some containers e.g. `base.css` for the HARTING style. If the file is not stored in the container you can obtain it from <https://devicename/css/base.css>.



**Figure 3: Self-Designed Container WebGUI**

### 3 Known Issues

No name server is installed on the container. Please run

```
apt-get update
```

and

```
apt-get install avahi-daemon
```

to resolve.



## 4 Version History

### Version 1.1.1\_r

- Systemd replaced by SysVinit.

### Version 1.1.0\_r

- Idconfig added

### Version 1.0.0