

HDC GETTING STARTED PART 1: A QUICK TOUR — VIDEO, 12:32



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Corporate Headquarters

Wind River
500 Wind River Way
Alameda, CA 94501-1153
U.S.A.
Toll free (U.S.A.): +1-800-545-WIND
Telephone: +1-510-748-4100
Facsimile: +1-510-749-2010

For additional contact information, see the Wind River website:

www.windriver.com

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29 January 2019

1. HDC GETTING STARTED PART 1: A QUICK TOUR — VIDEO, 12:32

Published on 6 October 2015

Transcript

Time (mm:ss)	Narration
From: 00:13	OK, what we're going to do in this session is take a quick tour through the facilities that are provided. I'm logged into a virtual machine, and this virtual machine will be available to you to download, and then you can use it just as is. The software tools are already installed, and we have a number of things already pre-setup for you, just to save time in this getting started series. I'm going to start by simply opening a console and kind of showing you around in the system, and if you'll notice, if I look here, I have in a "wr" for Wind River directory. I have all the software tools to find here, installed here for IDP version 3, and, so we can use that later in builds and for defining,
From: 01:00	you know, new projects that we want to create. I've also created, in my home directory, a "blds" directory, and, down in the blds directory, I've already provided one pre-built platform, just called "p5" in this case. And then there's some additional things that I've set up. There's some configuration scripts, and some other scripts that I've provided. This will simply help things along, and some sample code is there as well so, you'll be able to use some of these features later, in later sessions. But also I wanted to show you a quick tour through the Web browser console to the Helix Device Cloud. So, let me open up a browser real quick, and I've saved the link here for the Helix Device Cloud, and when I bring this link up then I can just simply log in. My user name and password are saved in the login information, but your login information should have been emailed to you, and then you would be
From: 02:03	able to, probably log into a different sandbox than the one I've selected, but your information will have been sent to you already. And when you log in, you're simply going to see what's called, you know kind of a Dashboard view, and there will be a list of devices shown down here, and you can select one of these devices. Now of course, in this view we're only seeing one device because I only have one device connected into this platform. However, normally, you would probably see many devices here, and in fact you could have thousands, many thousands of devices shown, and you would have to sort and search and filter, and you can put in search criteria and select the one that you want. In the case of having only one, it's very simple. We can click on that, and that will bring up the dashboard that you can take a look at and see, you know the last time this device was contacted was one second ago, and you can also see there's some log information of
From: 03:05	recent actions that have happened. If there were any outstanding alarm conditions you would see those listed here, and other information, you know audit trails and logging information that's provided is there. Also, over on this side you can see that there's actions that you can perform on the device, and you can open up a remote session into the device. Essentially have an SSH shell into your remote device. And then there's also in the dashboard, you can drop down here and select specific things that you want to look at. For example, some data or historical alarms. You can examine any of the historical information as well. So, also across the top, you'll see that there's a number of tabs or buttons lined up there. Now, typically in the assets is where you would go through and look at your
From: 04:01	device and manage your day-to-day operations. In the Manage tab is where you can define things that you want to do for the device, so if you wanted to define some actions, or some rules, some alarm definitions; various different things that you can define on your asset types.

	<p>And then over here in the view you can see the current ones that are already set up. So, if we go look at the current actions that are defined, you'll see that I've prepared just a few already. So, some functions that can be called that you can use, and we'll see the use of these a little bit later. I just wanted to walk through and show you how this is set up correctly. Also in the Content tab, you'll notice here is where you would go through and set up packages that were going to be deployed to your device. So if you wanted to install the new software version, things like that, here</p>
From: 05:00	<p>was where you would define a package, and essentially it'll ask you to upload a tarball, or a zip file, or something. Assign a version number, and then you can go through the series of other screens, and define different attributes or rules about deploying that package. We'll cover all this in more detail later. I just wanted to give you a quick walk through of what this looks like. So let me, let me go back to the Asset view, and I'm going to show you that this device is already up and running, and so you can see, and this particular device you'll see the name of it is just "getting-started-VBOX-001", and so that's the the serial number and the model type, and what it is, is that I've actually just started up a machine, a virtual machine, and so you can see here if I log in,</p>
From: 06:00	<p>then you can see that here's the device that's registered, and it's up in the platform, and so this is the one that we're going to use at least in the first few sessions here in the getting started series, just so you can kind of see how things work, and so what I wanted to demonstrate to you here is that, if I go and edit the configuration for this device and reboot it. So, for example, the configuration here is, once the device is booted up, you can find the configuration down in the default directory, and you'll notice there's a file here just called "default_settings", and if I take a look at that file, you'll see that it defines a number of different attributes about this device, and this is just JSON, a text file, and so I could go through and I could define some changes to any of these values if I wanted to,</p>
From: 07:01	<p>and so, let's say I wanted to change it to, you know something else. Let's just say, it doesn't really matter at this point. I just wanted to show you that it will show up differently, and so we can change the serial numbers, we can change the model types, and once you boot the device up, it'll re-register with the cloud, the Helix Device Cloud platform, and then you'll see this new device registered in the platform. So I'm just simply changing the serial number, and I'm going to save that, and then I'm going to, if you'll notice, that there is a "serial_number" file already saved, and I'm just going to delete that serial number file, just so that we can generate a new one when it boots up. So, if I go, delete that file.</p>
From: 08:02	<p>Ok, and then I'm going to delete the log file as well, and then I'm going to go ahead and then restart this device. So, simply rebooting this device, and I'm going to go, while that's doing that, I'm going to come back over here and I'm going to go back into the Manage tab, and I'm going to delete this one that's already registered and just remove it. So, now as that device boots back up, you'll see that it will start up the agent software running on the device, and then re-register with the cloud, and it hasn't finished its boot up yet. There we go. Ok, so now once it started back up, it will take just a moment before it actually registers, but this is really the initial finding the Helix Device Cloud.</p>
From: 09:01	<p>It's really going to notify the cloud that the device is alive and it's out there. Now, it hasn't really received any configuration yet, but this is just notifying that the device is online. And so now, we'll take another look at it, and now you'll see that the device has registered with the new name that we gave it. Also, once this device is up and running, we actually can start sending data directly into the cloud. So let's go over here, for example, back into the device and let's log in again, and then I'm going to go run one of those scripts that I showed you was in that directory. So, if I go down into that directory, and in this path, I have defined a few scripts. Those scripts do need to be run as the user, as the same user, that the agent software is running at. So, in this case, we're going to log in as "wra", because the agent is running as the wra user, and once I've</p>

From: 10:05	done that, you'll notice I can run some scripts. So let's say, for example, that I want to post some data up to the cloud platform. These are lua scripts, so I'm going to run them as a lua script, and I'm going to simply say "post data", and I'm going to pass some arguments here. So I'm going to pass the name of the data item that I want to set, and so let's say "temp", and then I'm going to pass in the data type for that, and I'm going to call it a "double", and then I'm going to assign it a value, and let's say it's "74.3" degrees, and then I'm going to send that data item to the cloud, and now if I come back over and take a look here, you'll be able to see that if I come to here and look at the current data,
From: 11:05	you'll be able to see that we have set the temp value of 74.3, and so, now, of course, "onboarded" is a variable that is usually used in rules where you can define if your device has received an initial configuration. As a convention, onboarded is the rule that we would define there. So, let's go back over here into our device, and let's change the value of onboarded, and it's a Boolean, and I'm going to set it to "True". Ok, and now that I've set the Boolean to true, let's go back over and take a look in the cloud platform. Let's just refresh our data. And now you can see that we've changed the value of onboarded. So this is just a simple example of how you can bring up a device and start setting values. This session was really intended to just be a quick tour.
From: 12:05	In the next sessions, we are going to cover many of these things in more detail. We're going to talk about how to develop applications, but I wanted to take you through this initial tour to kind of get a feel for what's going on, and how easy it is to bring up a device and start collecting data.

Contact: nlyons

Content ID: 045828

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