Connecting to the CG-1 via USB or Ethernet cable

REVISION HISTORY				
Date	**Rev**	**Description**	**Author**	**Approved**
11/1/18	0	Cable connections to Arke	CW	FmcC
15/09/20	A	Formating	JM	

Contents

Tools required

1. USB A to B cable
2. Ethernet Patch cable
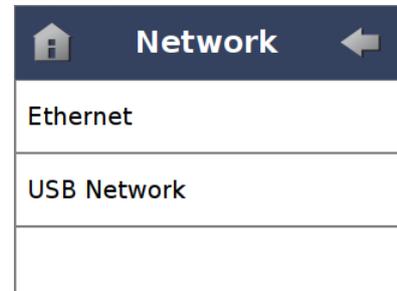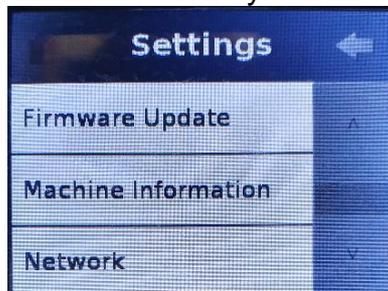3. Network switch / router

Procedure

The 2 connection procedures will be outlined below. The Actual connection through Orange will be outlined in part 3.
Note that this procedure is applicable to Orange version 1.2 and later.

2.1 Ethernet Connection:

The only equipment needed is an Ethernet cable that will connect the CG-1 to a router or an open network socket. (Please note that any firewall or similar security on the network connection may need to be disabled, depending on existing settings).

1. Power up the CG-1 and connect the Ethernet cable to the router or network socket.

2. Access the network setting on the CG-1 to ensure that an IP address has been assigned. (If no connection is available, check the cable and contact the IT dept.)

3. Select settings on the home screen followed by Network then ethernet.

4. Below shows a screen when the CG-1 is connected to the network (IP address may vary) and when it is not connected to the network

5. Record the IP address, this will be unique to this machine on your network and will be used to identify a specific machine.

6. Note that the IP addresses are typically assigned in a dynamic manner on a network as a consequence the IP address may change when the machine is powered down. This is network dependent.

7. Skip to the orange connection steps below (Page: 4).

2.2 USB connection

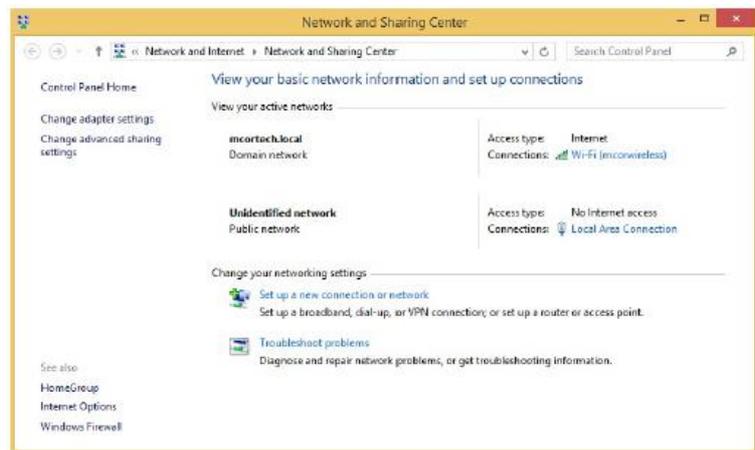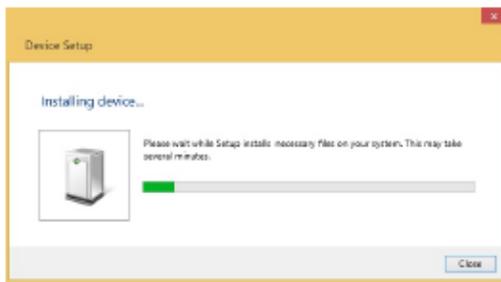To connect a computer to the CG-1 using a USB cable a USB A to B cable must be connected from the rear of the CG-1 to the computer. (Note that the front or internal ports cannot be used for direct communication only for project transfer).

When the CG-1 is powered up plug in the cable. The computer may detect the machine (depending on privileges, firewall setting, permissions, operating system and architecture). If upon detection, the operating system installs the drivers.

1. Open the network and sharing centre. (the machine should show up as an unidentified network)

2. Note that for all USB connections the machine will show up on the device manager as a "network adapter" (RNDIS). When connected to the machine the IP address will always be 192.168.7.2
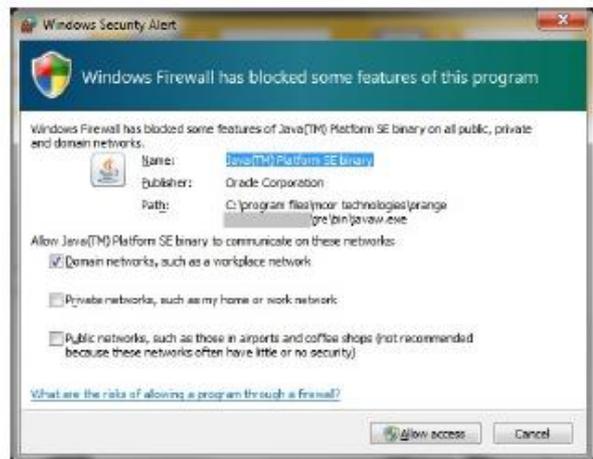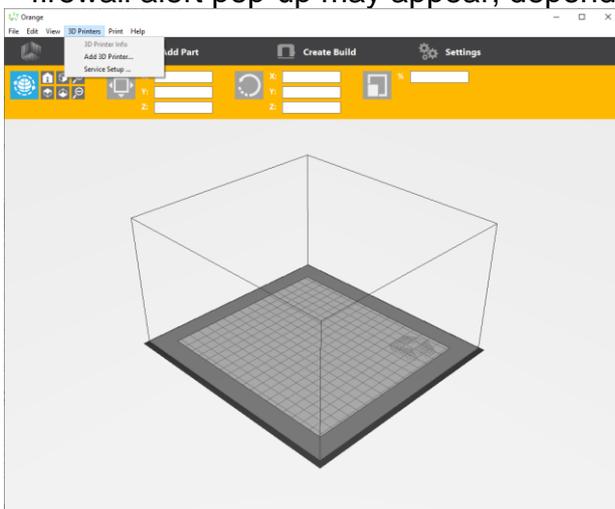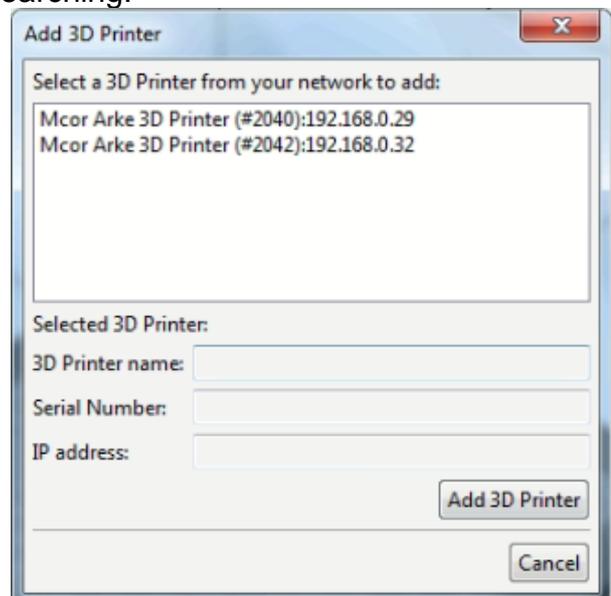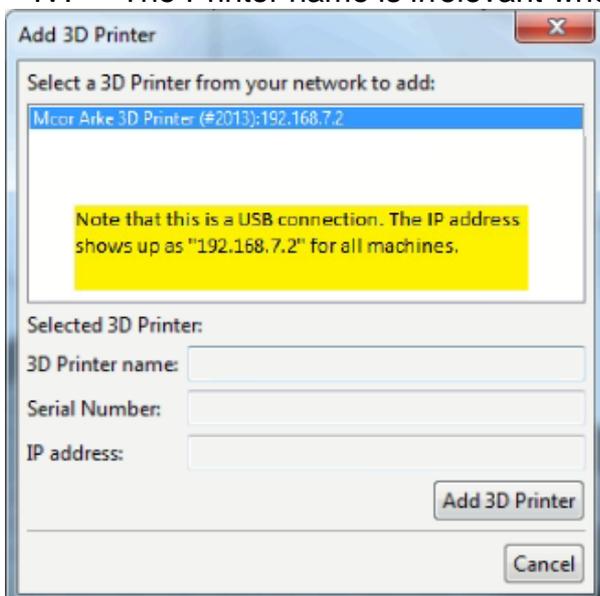
3 Using Orange to transfer or delete projects:

To date projects can only be transferred to and deleted from an CG-1 remotely using the Orange software. (Version 1.2 or newer).

1. Install Orange on your pc.

2. Go to the "3D Printers" drop down on the toolbar. Select "Add 3D Printer". A windows firewall alert pop-up may appear, depending on your computer settings.

3. Below is the screen displayed when Orange searches the local network for connected CG-1. Note that the serial number of the unit is displayed as the "name" later. Notes:

   I. If there is a USB connection present Orange will not search for networked units. You will need to remove the USB cable.

   II. You cannot connect to 2 CG-1 via USB on the same computer at the same time. This means that if you want to connect to 2 CG-1 using the USB cable you must delete one of the profiles.

   III. You cannot add 2 devices with the same IP address.

   IV. The Printer name is irrelevant when searching.
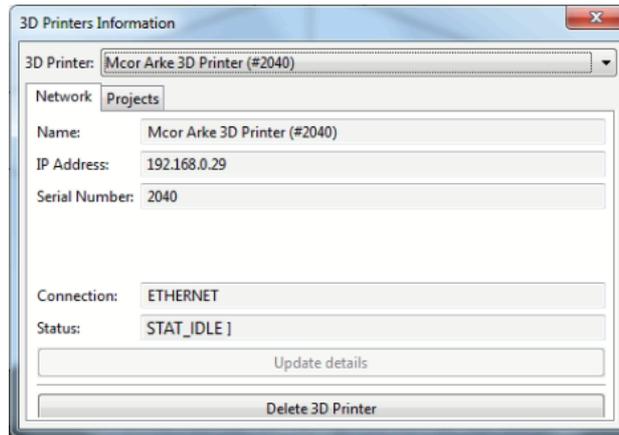
4. When connected to a machine you will see the details displayed on 2 separate tabs. The first tab shows the connection information including machine name, method of connection and Status.

5. Below is the Projects tab. This is the same for both USB and Ethernet connections. Here will be a list of all projects currently stored on your CG-1. To remove a project, you must first highlight it. (note above it is greyed out). To add a project, press the "Add Project" button which will open an explorer window: