



**C120F / C300
Quick Start
Guide**

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Unpacking Instructions

1. Unpack the JBM unit.
2. Verify the following components are enclosed for the C120 (Figure A).

Figure A: Package Contents C120



Note: Non-US power supplies require customer-supplied power cord to connect power supply to AC power outlet.

3. Verify the following components are enclosed for the C300 (Figure B).

Figure B: Package Contents C300



Note: Non-US power supplies require customer-supplied power cord to connect power supply to AC power outlet.

4. If any items are missing, please contact **JBM** at **1-800-489-7781**.

Preparation C120

1. Verify that you have one of the following, supported cellular cards:

Alltel PC 5750
Huawei EC360
Huawei 620 (Non-US GSM)
Kyocera KPC 650
Kyocera 680 (req. caddy. Not supported w/VMB5000 caddy)
Novatel EX720 (req. caddy)
Novatel 620
Novatel 640 (req. caddy)
Novatel S720 (Sprint)
Novatel V720 (Verizon)
Novatel EX720 (req. caddy)
Novatel XU870 (req. caddy)
Novatel X950D (gsm) (req. caddy)
Option GT Max 3.5 HSDPA
Option GT Max 3.5 HSUPA
Pantech PX500
Sierra Wireless Aircard 555
Sierra Wireless Aircard 580
Sierra Wireless Aircard 595
Sierra Wireless Aircard 597E (cdma) (req. caddy)
Sierra Wireless Aircard 850 (Non-US GSM)
Sierra Wireless Aircard 860 (AT&T)
Sierra Wireless Aircard 875 (AT&T)
Sierra Wireless Aircard 881 (AT&T)
Sierra Wireless Aircard 5220
Sony GC82/GC83/GC85
Sony Ericson PC300 (gsm)
Verizon PC5740
Verizon PC5750

Note: "req. caddy" denotes an aircard that is a PCI Expressbus card. PCI Express cards are smaller than a standard PCMCIA adapter and require an appropriate adapter to work in a standard PCMCIA CardBus Slot. Unfortunately, not all manufacturers provide adapters that are 100% compatible. If you are using one of the PCI Express cards listed here, and your JBM router does not automatically recognize your card when it is inserted, please try a different PCMCIA Adapter Caddy before contacting JBM Technical Support.

We continually add support for new Data Cards to the Gateways. If your Data Card is not supported, please contact us so we can provide an updated driver.

2. Using the instructions that accompanied the card, verify that the card is properly activated and functioning correctly prior to installing the card into the JBM Gateway:

- Install the software that came with the aircard on a laptop.
 - Install the aircard into the laptop.
 - Follow the carrier provided procedures to properly activate the card, and unlock the card if necessary.
 - Using the browser on the laptop insure that you are able to browse the Internet.
3. Resolve any and all signal/reception related issues with the aircard installed in the laptop before installing the card into the JBM Gateway.
 4. Gently, insert the Aircard into the PCMCIA slot. Be sure it is firmly seated.
 5. Attach power supply connector to C120 and connect power supply plug to an AC power outlet.
 6. Verify the PWR (yellow) LED is lit to indicate that the unit is receiving power.
 7. Establish access to the unit through Gateway Administration Utility.

Preparation C300

1. Verify with your service provider that the SIM installed in the C300 is activated.
2. Connect one of the antennas to the “Main” antenna port on the front of the C300.
3. Attach power supply connector to C120 and connect power supply plug to an AC power outlet.
4. Verify the PWR (yellow) LED is lit to indicate that the unit is receiving power.
5. Establish access to the unit through Gateway Administration Utility.

Accessing the Graphical Management Interface

Step 1: Connect PC to JBM Gateway

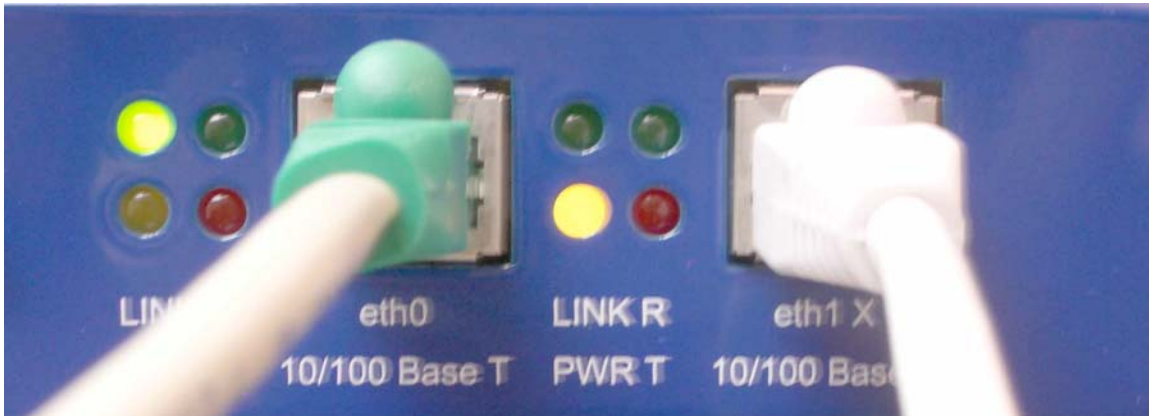
METHOD – 1 ETH0: (Straight Ethernet Port)

Connect a crossover CAT-5 Ethernet cable between the local PC and the JBM unit's ETH0. **Verify the link LED is lit.** (Straight cable from a HUB/Switch).

METHOD 2 - ETH1:(Crossed-over Ethernet Port)

Connect straight CAT-5 Ethernet cable between the local PC and the JBM unit's ETH1. **Verify the link LED is lit.** (Crossover cable for HUB/Switch).

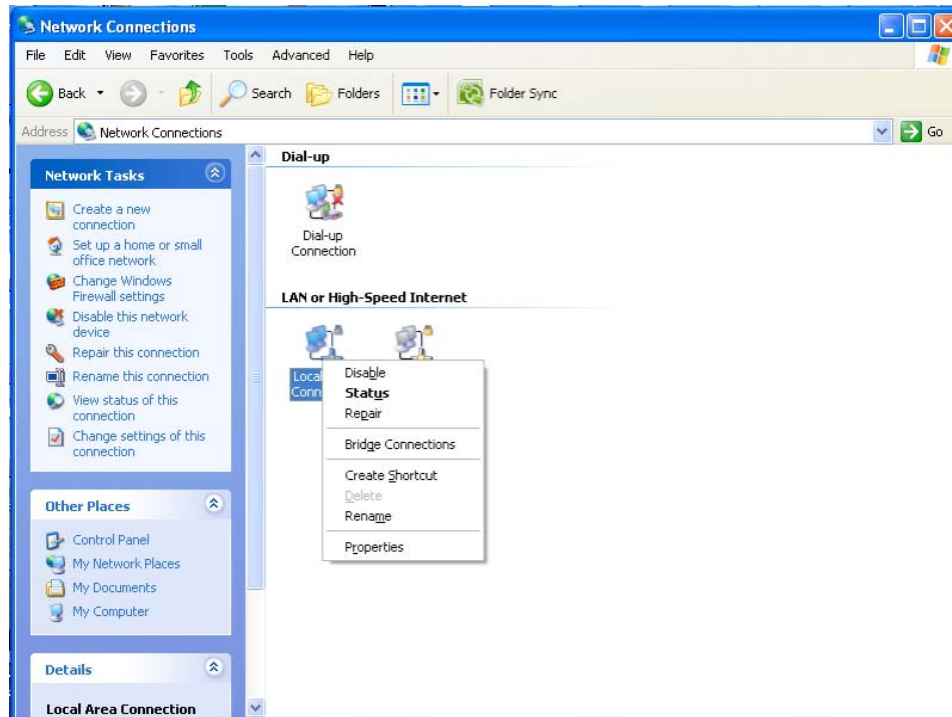
Port	Cable	Device
Straight (ETH0)	Straight	HUB or Switch
Straight (ETH0)	Crossed	PC
Crossed (ETH1)	Straight	PC
Crossed (ETH1)	Crossed	HUB or Switch



Note: This example shows cabling to a PC. The link LED is not lit for ETH1. Without a link LED lit either Method 1 must be used or the cabling must be checked.

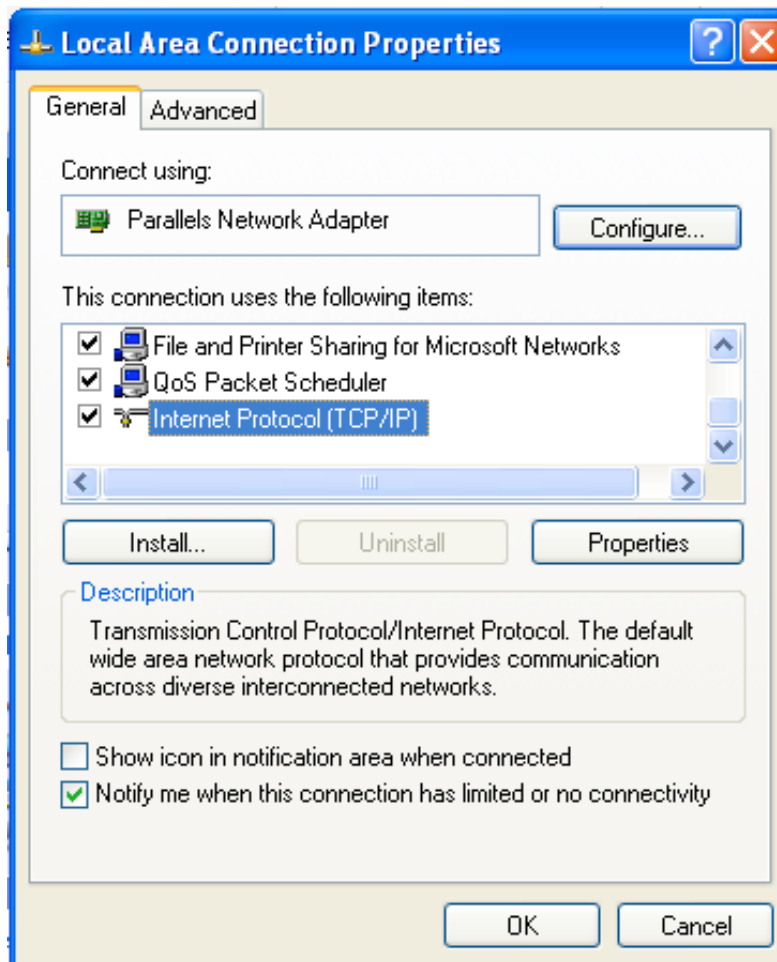
Step 2: Setup PC IP Address

Set the PC's IP Address by going to control panel and selecting network connections, the screen below will appear:

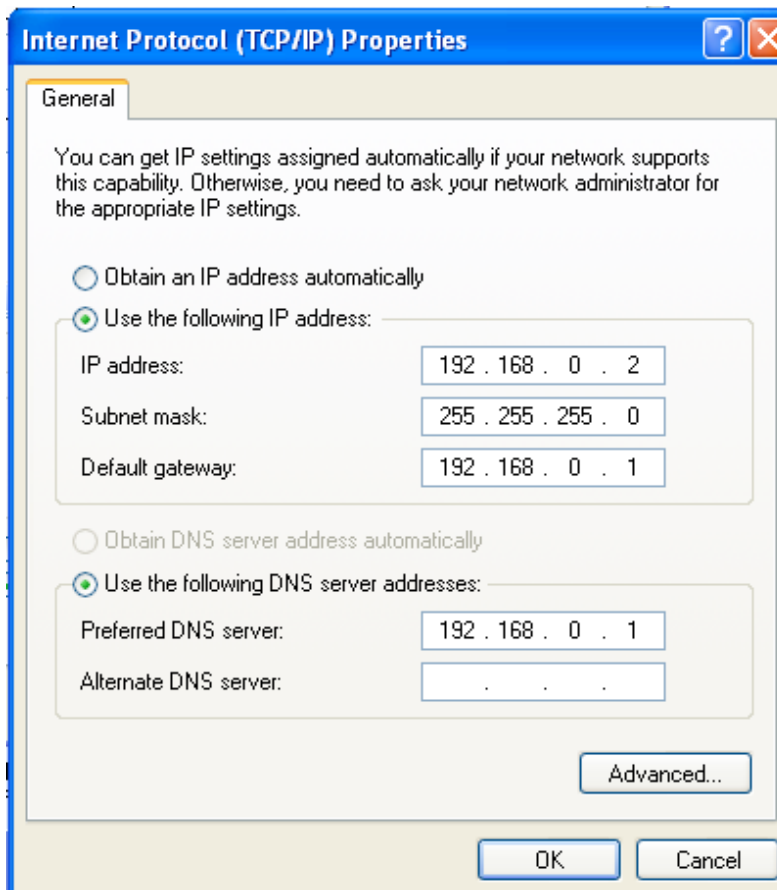


- Right Click “Local Area Connection” and select “Properties” (as shown to the left).

NOTE: The screens and instructions displayed are based on Windows XP. Your system may be different. If you have any problems contact your system admin.

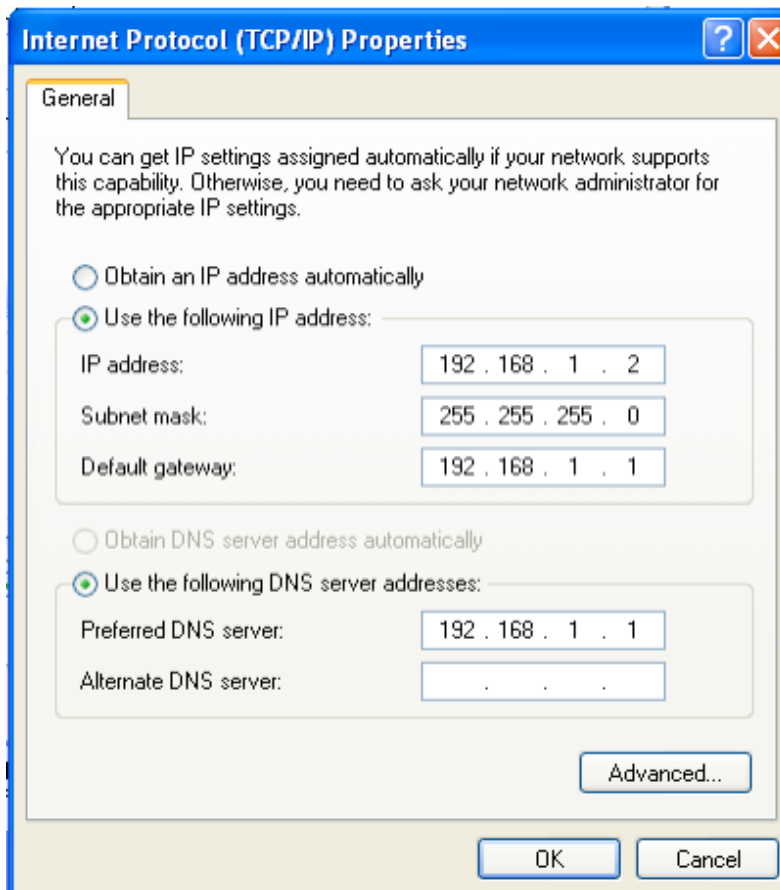


- *Scroll down to the bottom of the following items and select “**Internet Protocol (TCP/IP)**” (as shown to the left).*



METHOD 1: PC to ETH0

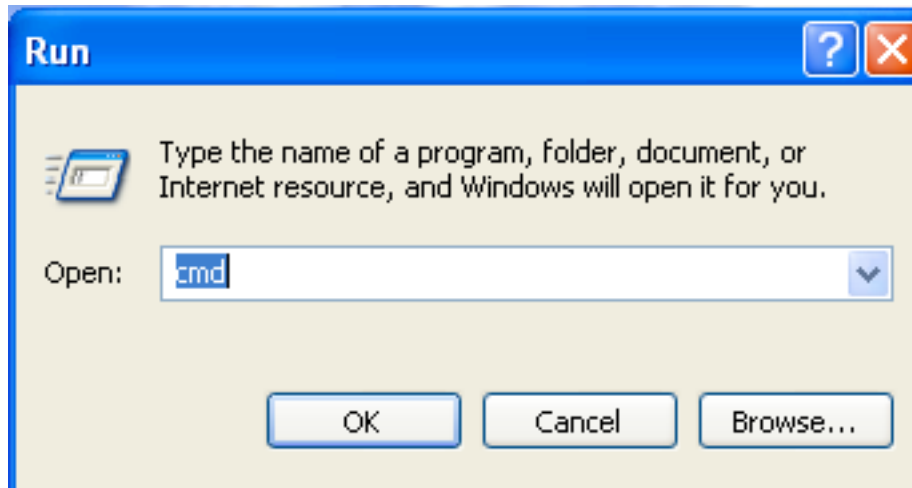
- Select **“Use the following IP address”** and *fill in* the blank fields with the information below:
 - *IP address:* 192.168.0.2
 - *Subnet mask:* 255.255.255.0
 - *Default gateway:* 192.168.0.1
 - *Preferred DNS:* 192.168.0.1
- Click **“OK”**
- *The previous screen will appear Click “OK”*



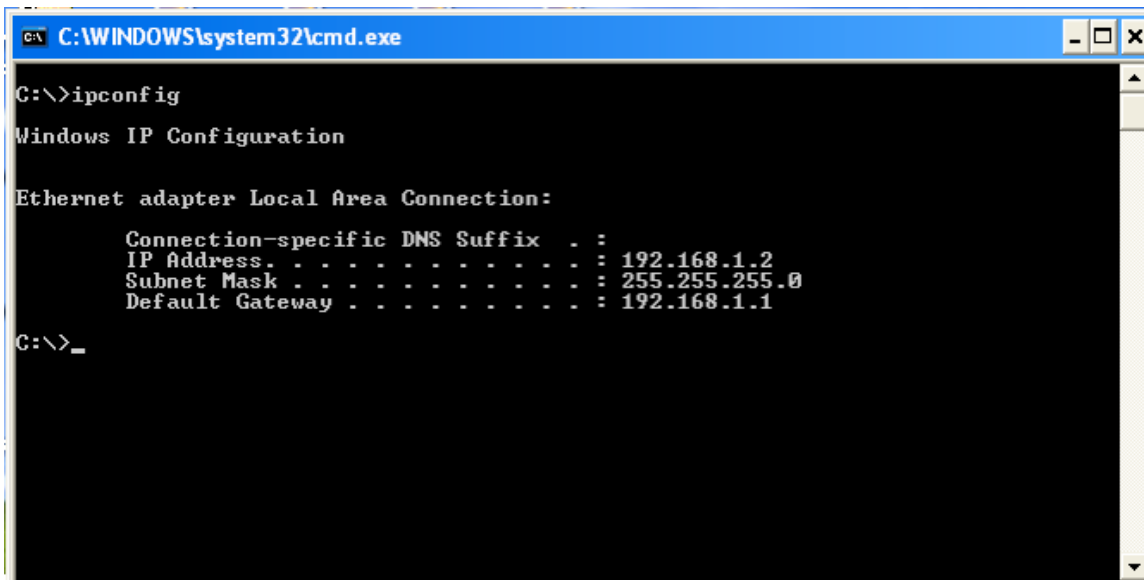
METHOD 2: PC to ETH1

- Select “Use the following IP address” and fill in the blank fields with the information below:
 - IP address: 192.168.1.2
 - Subnet mask: 255.255.255.0
 - Default gateway: 192.168.1.1
 - Preferred DNS: 192.168.1.1
- Click “OK”
- The previous screen will appear Click “OK”

Verify that the IP change was accepted or acquired on the PC.



- Select “Start>Run on your desktop ” Type “cmd” Click “OK”



- Type “**ipconfig**” <Enter>
- METHOD 1 should display an IP of 192.168.0.2
- METHOD 2 should display an IP of 192.168.1.2

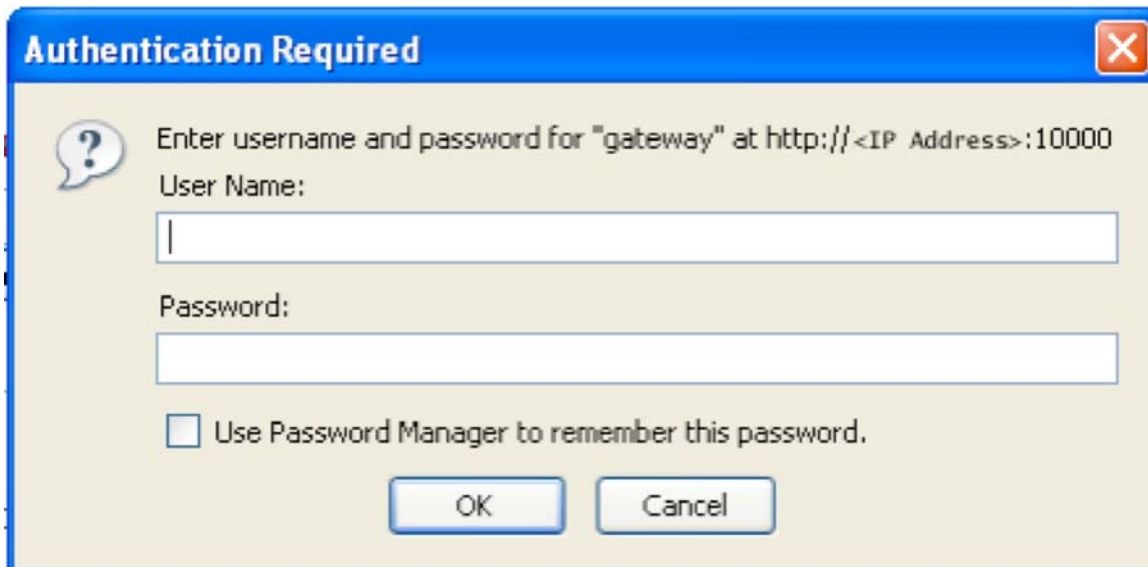
Step 3: Access JBM Webserver

- Open a web browser and enter the following in the address bar:

METHOD 1: <http://192.168.0.1:10000/>

METHOD 2: <http://192.168.1.1:10000/>

- You will receive a login pop up screen.



JBMgateway Login Instructions

- User Name enter: **admin** (*lowercase letters*)
- For Password enter: **six digit serial number** of unit (*lowercase letters*)

Upon successfully logging in you will be rewarded with the following screen:

NOTE: The following information can be used for both the C120 and the C300, therefore the screenshots will be from the C120.

Status	Admin	Networking	Services	Advanced
--------	-------	------------	----------	----------

C120F Administration Utility - Version 3.00.072208-1

Installed Firmware Version


JBM/pc Version 2.22 -- Tue Jul 22 18:44:27 CDT 2008


Device Serial Number

<Device Serial Number>


Physical Interface Status

Ethernet Interface	Connection State	IP Address	Link Status
eth0	Up	192.168.0.1	Up
eth1	Up	192.168.1.1	Up

Cellular Interface	Activation	Connection	IP Address	Signal Strength
ppp0	Succeeded	Enabled	68.133.196.168 1x	 83

Select auto update interval: 

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At this point, you are connected to the Gateway. You can now configure the unit to meet your needs.

Should you see a screen similar to the following:

Status **Admin** **Networking** **Services** **Advanced**

C120F Administration Utility - Version 3.00.072208-1

Installed Firmware Version

JBM/pc Version 2.22 -- Tue Jul 22 18:44:27 CDT 2008

Device Serial Number

<Device Serial Number>

Physical Interface Status

Ethernet Interface	Connection State	IP Address	Link Status
eth0	Up	192.168.0.1	Up
eth1	Up	192.168.1.1	Up

Cellular Interface	Activation	Connection	IP Address	Signal Strength
ppp0	Unavailable	Unavailable	N/A	1x

Select auto update interval:

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This could indicate that the cellular aircard (C120)/ sim (C300) has not been activated. Please contact your service provider to ensure proper activation.

Cellular Card Configuration

Your JBM Gateway is able to detect many cellular cards, but others must still be configured manually. If you are using a GPRS, EDGE, or HSDPA card that requires the use of a userid, password, and APN, configure your card manually, as covered in the next section. If you are using any of these cards you will need to work through this section:


- Huawei 620 (gsm) (Non-US GSM)**
- Novatel XU870 (gsm) (req. caddy)**
- Novatel X950D (gsm) (req. caddy)**
- Option GT Max 3.5 HSDPA**
- Option GT Max 3.5 HSUPA**
- Sierra Wireless Aircard 850 (gsm) (Non-US GSM)**
- Sierra Wireless Aircard 860 (gsm) (AT&T)**
- Sierra Wireless Aircard 875 (gsm) (AT&T)**
- Sierra Wireless Aircard 881 (gsm) (AT&T)**
- Sony GC82/GC83/GC85 (gsm)**
- Sony Ericson PC300 (gsm)**

If you are using one of the newer 1xRTT/1xEVDO/1xEVDO rev A, USB Serial based cards, your JBM gateway has probably automatically detected, configured, and activated your cellular connection for you, so you can skip this section and proceed to the next section to verify your cellular connectivity. If you are using any of these cards you can skip this section:

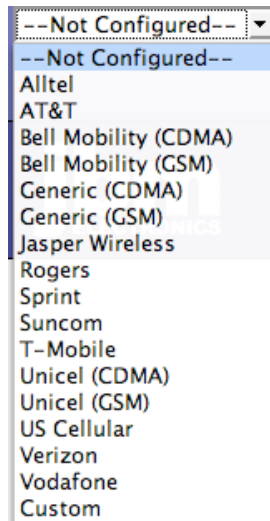
- Alltel PC 5750 (cdma)**
- Huawei EC360 (cdma)**
- Kyocera KPC 650 (cdma)**
- Kyocera 680 (cdma) (req. caddy. Not supported w/VMB5000 caddy)**
- Novatel EX720 (cdma) (req. caddy)**
- Novatel 620 (cdma)**
- Novatel 640 (cdma) (req. caddy)**
- Novatel S720 (Sprint) (cdma)**
- Novatel V720 (Verizon) (cdma)**
- Novatel EX720 (cdma) (req. caddy)**
- Pantech PX500 (cdma)**
- Sierra Wireless Aircard 555 (cdma)**
- Sierra Wireless Aircard 580 (cdma)**
- Sierra Wireless Aircard 595 (cdma)**
- Sierra Wireless Aircard 597E (cdma) (req. caddy)**
- Sierra Wireless Aircard 5220 (cdma)**
- Verizon PC5740 (cdma)**
- Verizon PC5750 (cdma)**

Navigate through the GAU menus Networking Tab -> Cellular Connection -> Configuration screen shown below:


Step 1: Cellular Carrier Selection

Status	Admin	Networking	Services	Advanced
Cellular Connection				
Enable Interface ? <input type="button" value="No"/> ?				
Select Cellular Carrier: <input type="button" value="--Not Configured--"/> ?				
<input type="button" value="Cancel"/> <input type="button" value="Apply"/>				
JBM Electronics Co. 4645 LaGuardia Drive St. Louis, MO 63134				Toll Free: (800) 489-7781 Fax: (314) 426-0007 Web: www.jbmelectronics.com

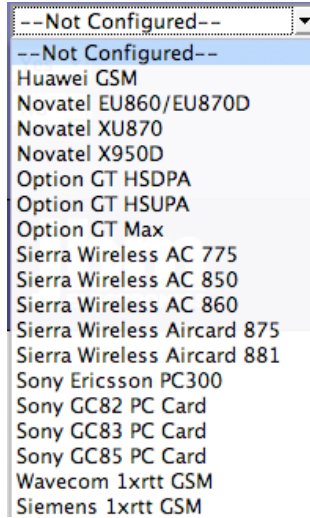
- Select “Yes” to enable the interface.
- Select the cellular carrier you are using from the drop-down menu.



--Not Configured--
--Not Configured--
Alltel
AT&T
Bell Mobility (CDMA)
Bell Mobility (GSM)
Generic (CDMA)
Generic (GSM)
Jasper Wireless
Rogers
Sprint
Suncom
T-Mobile
Unicel (CDMA)
Unicel (GSM)
US Cellular
Verizon
Vodafone
Custom

Status	Admin	Networking	Services	Advanced
Cellular Connection				
Currently Installed Modem: No modem detected				
Enable Interface ?				?
Yes ▾				
Select Cellular Carrier:				?
AT&T ▾				
Enter User Name:				?
<input type="text"/>				
Enter Password:				?
<input type="password"/>				
Confirm Password:				?
<input type="password"/>				
Select APN Context:				?
1 ▾				
Enter APN:				?
<input type="text"/>				
Select Cellular Modem Model:				?
--Not Configured-- ▾				
Enable Modem Auto-Detection?				?
Yes ▾				
View/Change Advanced Options?				
No ▾				
				Cancel Apply
JBM Electronics Co. 4645 LaGuardia Drive St. Louis, MO 63134				Toll Free: (800) 489-7781 Fax: (314) 426-0007 Web: www.jbmelectronics.com

- Select the Aircard you are using:



--Not Configured--

- Not Configured--
- Huawei GSM
- Novatel EU860/EU870D
- Novatel XU870
- Novatel X950D
- Option GT HSDPA
- Option GT HSUPA
- Option GT Max
- Sierra Wireless AC 775
- Sierra Wireless AC 850
- Sierra Wireless AC 860
- Sierra Wireless Aircard 875
- Sierra Wireless Aircard 881
- Sony Ericsson PC300
- Sony GC82 PC Card
- Sony GC83 PC Card
- Sony GC85 PC Card
- Wavecom 1xrtt GSM
- Siemens 1xrtt GSM

Status	Admin	Networking	Services	Advanced
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Cellular Connection

Currently Installed Modem: No modem detected

Enable Interface ? ?

Select Cellular Carrier: ?

Enter User Name: ?

Enter Password: ?

Confirm Password: ?

Select APN Context: ?


Enter APN: ?

Select Cellular Modem Model: ?

Enable Modem Auto-Detection? ?

View/Change Advanced Options? ?


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Step 2: Set the Userid, password and APN

- If you are using a GPRS, Edge, or HSDPA based card, enter the userid, password, and APN that was provided by your cellular carrier. This information should have been packaged with your SIM chip. If you do not have this information please contact your carrier account representative or the carrier' support department before proceeding.

Status	Admin	Networking	Services	Advanced
Cellular Connection				
Currently Installed Modem: No modem detected				
Enable Interface? <input type="text" value="Yes"/> ?				
Select Cellular Carrier: <input type="text" value="AT&T"/> ?				
Enter User Name: <input type="text" value="trialXXX@internettrial.cc"/> ?				
Enter Password: <input type="password" value="*****"/> ?				
Confirm Password: <input type="password" value="*****"/> ?				
Select APN Context: <input type="text" value="1"/> ?				
Enter APN: <input type="text" value="internettrial"/> ?				
Select Cellular Modem Model: <input type="text" value="Option GT HSDPA"/> ?				
Enable Modem Auto-Detection? <input type="text" value="Yes"/> ?				
View/Change Advanced Options? <input type="text" value="No"/> ?				
<input type="button" value="Cancel"/> <input type="button" value="Apply"/>				
JBM Electronics Co. 4645 LaGuardia Drive St. Louis, MO 63134				Toll Free: (800) 489-7781 Fax: (314) 426-0007 Web: www.jbmelectronics.com

Note: The userid, password, and APN are case specific. Be certain that you use the exact information as provided by your carrier.

Step 3: Apply the Configuration

- Click the “Apply” button to save and activate the configuration.

Verify Cellular Connectivity

Browse to the Status screen shown below:

The screenshot shows the 'Status' page of the C120F Administration Utility. The page has a blue header with navigation tabs: Status, Admin, Networking, Services, and Advanced. The main content area is titled 'C120F Administration Utility - Version 3.00.072208-1' and contains several sections:

- Installed Firmware Version:** JBM/pc Version 2.22 -- Tue Jul 22 18:44:27 CDT 2008
- Device Serial Number:** <Device Serial Number>
- Physical Interface Status:** A table showing the status of Ethernet and Cellular interfaces.

Ethernet Interface	Connection State	IP Address	Link Status
eth0	Up	192.168.0.1	Up
eth1	Up	192.168.1.1	Up

Cellular Interface	Activation	Connection	IP Address	Signal Strength
ppp0	Succeeded	Enabled	68.133.196.168	1x 83

At the bottom of the status section, there is a dropdown menu for 'Select auto update interval:' set to 'Disabled' and a help icon.

The footer contains the JBM Electronics Co. address (4645 LaGuardia Drive, St. Louis, MO 63134), the JBM Electronics logo, and contact information: Toll Free: (800) 489-7781, Fax: (314) 426-0007, and Web: www.jbmelectronics.com.

As you can see, the unit is receiving good signal from the cellular network, it is connected, and has been issued an IP address.

At this point, if you previously verified that your aircard worked properly in your PC/laptop (C120), or verified that the SIM is activated (C300), and have been accessing the GAU to configure your JBM gateway via its' browser, you should be able to access the Internet.

- Open a browser on the PC/Laptop, and attempt to browse the Internet.

Note:

Depending on the provisioning of your card, particularly in corporate applications in which the JBM Gateway is providing cellular backup connectivity to wired circuits, your card may be restricted from Internet access. If this is the case, you may want to instead test to insure that you are able to access your corporate network. If you have any question as to your configuration please check with your network administration.

If you were able to successfully access the Internet, or your corporate network, then congratulations, your JBM Gateway is up and running and you have successfully completed the Quick Start. You may skip the troubleshooting section that follows.

If you were unable to access the Internet, or your corporate network, the section that follows will help you to determine the cause of your difficulties.

Cellular Connectivity Troubleshooting

If you are reading this section, you have followed all of our instructions so far and your JBM Gateway is not communicating. This section is intended to give you some additional things to check in order to isolate the cause of your difficulties.

Cellular Reception

Before we get into specifics regarding how to identify and address specific problems that can be encountered, it is important that we spend a moment talking about cellular signal reception, and appropriate expectations.

All of the major cellular carriers expend significant sums insuring that we have excellent signal coverage within their coverage areas. However, they have no control over the environments in which we attempt to place or use our cellular devices.

The principles behind cellular data reception are similar to cellular phone reception. Therefore, our environment has the potential to significantly impact our ability to receive a good quality cellular signal.

You should be aware that it is possible to stand in the parking lot of a building and have perfect reception, but walk just 10 feet inside a concrete and steel building and have absolutely no reception at all.

The important thing to understand here is that in many, many instances it is not the cellular network that causes us reception problems, but the environment in which we place our cellular devices.

For this reason, JBM Electronics strongly recommends the use of external antennas when implementing cellular data. It can make the difference between an implementation that works and one that doesn't.

Verifying IP Connectivity

First, let's check to make sure that you card is connecting to the cellular network and obtaining an IP address.

Navigate to the GAU screen shown below:

The screenshot shows the 'C120F Administration Utility - Version 3.00.072208-1' web interface. At the top, there are navigation tabs: Status, Admin, Networking, Services, and Advanced. The main content area is divided into sections: 'Installed Firmware Version' (JBM/pc Version 2.22, Tue Jul 22 18:44:27 CDT 2008), 'Device Serial Number' (<Device Serial Number>), and 'Physical Interface Status'. The 'Physical Interface Status' section contains two tables. The first table shows Ethernet interfaces: eth0 (Up, 192.168.0.1) and eth1 (Up, 192.168.1.1). The second table shows Cellular interfaces: ppp0 (Unavailable, Unavailable, N/A, 1x signal strength). At the bottom, there is a 'Select auto update interval' dropdown set to 'Disabled' and a help icon. The footer includes JBM Electronics Co. contact information, the JBM logo, and a toll-free number.

Ethernet Interface	Connection State	IP Address	Link Status
eth0	Up	192.168.0.1	Up
eth1	Up	192.168.1.1	Up

Cellular Interface	Activation	Connection	IP Address	Signal Strength
ppp0	Unavailable	Unavailable	N/A	1x

If your screen looks similar to the one shown above, you are having signal reception difficulties. As you will notice, the card is neither connected to the cellular network, nor has it been able to obtain an IP address from the network.

You can further verify this condition by examining the LED signal meter on the left side of the front panel of the device as shown in the picture below:



If the top and bottom LEDs are flashing the device is not receiving sufficient signal from the cellular towers in order to be able to connect to the network. Typically, 2-3 LEDs of reception are a minimum requirement for a sustainable connection.

Minimal Reception

On occasion, you can find yourself in a situation where you have just enough signal to be able to communicate with the cellular tower, and obtain an IP address, but not enough reception to be able to sustain a viable connection.

If your cellular card is using dynamically assigned IP addresses, you can determine if you are in a situation like this by watching the "Cellular Interface" field in the screen below:

Status **Admin** **Networking** **Services** **Advanced**

C120F Administration Utility - Version 3.00.072208-1

Installed Firmware Version

JBM/pc Version 2.22 -- Tue Jul 22 18:44:27 CDT 2008

Device Serial Number

<Device Serial Number>

Physical Interface Status

Ethernet Interface	Connection State	IP Address	Link Status
eth0	Up	192.168.0.1	Up
eth1	Up	192.168.1.1	Up

Cellular Interface	Activation	Connection	IP Address	Signal Strength
ppp0	Succeeded	Enabled	68.133.196.168	1x 83

Select auto update interval:

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Web: www.jbmelectronics.com

If you refresh this screen every few minutes and notice that the “IP Address” is changing frequently, it is very possible that your device is connecting to the network and obtaining an IP address, and then the connection to the cellular network is being dropped. When the connection is re-established the device is then issued a different IP address.

In this situation an external antenna can boost the signal enough to provide a sustainable cellular connection.

Authentication Issues

If you are using a GPRS/EDGE/HSDPA card, and have at least three LEDs of signal on the front panel signal meter, your radio connection to the network may be just fine. The problem may lie in logging onto the cellular network.

Return to the screen shown below:

Status	Admin	Networking	Services	Advanced
Cellular Connection				
Currently Installed Modem: No modem detected				
Enable Interface? <input type="text" value="Yes"/> 				
Select Cellular Carrier: <input type="text" value="AT&T"/> 				
Enter User Name: <input type="text" value="trialXXX@internettrial.cc"/> 				
Enter Password: <input type="text" value="*****"/> 				
Confirm Password: <input type="text" value="*****"/> 				
Select APN Context: <input type="text" value="1"/> 				
Enter APN: <input type="text" value="internettrial"/> 				
Select Cellular Modem Model: <input type="text" value="Option GT HSDPA"/> 				
Enable Modem Auto-Detection? <input type="text" value="Yes"/> 				
View/Change Advanced Options? <input type="text" value="No"/>				
				<input type="button" value="Cancel"/> <input type="button" value="Apply"/>
JBM Electronics Co. 4645 LaGuardia Drive St. Louis, MO 63134				Toll Free: (800) 489-7781 Fax: (314) 426-0007 Web: www.jbmelectronics.com

Re-verify your userid, password, and APN information. Be sure to pay close attention, as all three of these items are case specific and must be entered exactly in order to properly log into the cellular network.

Don't forget to click "Apply" if you make any changes.

JBM Technical Support

If you have followed all of the instructions up to this point, have satisfied yourself that you are not having an authentication problem, are convinced that you have sufficient reception, and your gateway is still not communicating, then it is time to contact JBM Technical Support at 800-489-7781 and we will be happy to assist you in getting your gateway up, running, and operational.

HARDWARE STATUS LEDS		
Power:	Yellow – Power Connection Status (<i>PWR</i>)	
	<i>ON</i>	Power is being received by the C120
	<i>OFF</i>	Power is not being received by the C120
Ethernet Ports:	Green – LAN Connection Status (<i>LINK</i>)	
	<i>ON</i>	C120 is connected to LAN
	<i>OFF</i>	C120 is not connected to the LAN, or the C120 is in the process of being reset
	RED – Data Transmit Activity Status (<i>T</i>)	
	<i>ON-OFF-ON (Flickering)</i>	C120 is transmitting packets
	Green – Data Receive Activity Status (<i>R</i>)	
<i>ON-OFF-ON (Flickering)</i>	C120 is receiving packets	
Card Bus:	Yellow – Activity (<i>ACT</i>)	
	<i>ON</i>	Card negotiation with Bus in C120

SPECIFICATIONS		
Console Port:	Baud Rate:	110-115,200 bps
	Interface:	One Female DB-9, RS-232C DCE
Ethernet Ports:	Mbps:	10/100BaseT
	Interface:	Two Female RJ-45 connectors
Card Bus:	Interface:	Type II Connector, 3.3V or 5V, 16 bit PC Cards or 32 bit Card Bus
Operating System:	Linux 2.6 Kernel	
Management:	Console Port:	CLI Access through async connection
	IP Protocol	SNMP, HTTP/S, Telnet, SSH
Power:	12V DC (External) 120 VAC 60Hz or 120-240 VAC 50/60Hz	
Physical:	Size:	7" W x 2.5" H x 8" L
	Weight:	2 pounds
Processor:	486DX-100	
Memory:	32 MB RAM, 16MB Flash	
Warranty:	1 Year Parts and Labor	

Software Licensing Terms and Conditions

Software supplied with each JBM Electronics' product remains the exclusive property of JBM Electronics. JBM grants with each unit a perpetual license to use this software with the express limitation that the software may not be copied or used in any other product for any purpose. It may not be reverse engineered, or used for any other purpose other than in and with the computer hardware sold by JBM Electronics.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy; and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference to radio communications, in which case the user will be required to correct the interference at their own expense.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Information To The User

If this equipment causes interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

In order to meet FCC emissions limits, this equipment must be used only with cables that comply with IEEE 802.3

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems".

This booklet is available from:

U.S. Government Printing Office
Washington, DC 20402
Stock No. 004-000-00345-4

Warranty

JBM Electronics provides a limited hardware warranty for the Gateway, which consists of the following:

- This warranty is effective for one year from the delivery date of the Gateway to the purchaser.
- The purchaser is responsible for returning the defective unit to our factory, freight prepaid.
- If the Gateway is under warranty, we will repair it at our cost and return it, freight prepaid, via UPS ground service.
- If the Gateway is not covered by the warranty, we will notify you of the repair charges. We will not repair the Gateway without your permission.
- Repairs are guaranteed for 90 days or the remainder of the warranty, whichever is longer.

Buyer's remedies for breach of warranty shall be limited to repair or replacement subject to adjustment as stated herein, or full or partial adjustment to purchase price.

The JBM Electronics Gateways are provided with the following warranty:

1. Hardware maintenance and repair is available on a return to factory basis.
2. Configuration assistance is included for the first 60 days after the initial contact to JBM Technical support. After this initial period, configuration assistance will continue to be available on a chargeable basis.
3. Software support does not provide for custom code. Custom changes are available as a chargeable option.
4. The warranty only covers items with a serial number. Cables and adapters are not covered.

Extended Warranty Program

JBM offers an extended warranty for the Gateway. This program extends the original warranty on a yearly basis. In addition to extending the original warranty, the emergency replacement program is included for the cost of freight only.

The extension must be purchased before the original warranty expires. Please contact JBM Electronics for further information

Except for the express warranty set forth herein, JBM Electronics Co. grants no warranties, either express or implied, of merchantability and fitness. The stated express warranty is in lieu of all liabilities or obligations of JBM Electronics Co. for damages including but not limited to consequential damages occurring out of or in connection with the delivery, use or performance of JBM products.