

DSX Access Systems, Inc.

IP OnDemand

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DSX now offers an efficient process for IP Communications. The ability to open a communication portal only when necessary (OnDemand), offers increased system integrity. In theory it operates like a Dial-Up modem, OnDemand opens the communication portal, data is exchanged, and the portal is closed. This allows the use of Internet or Cellular metered service for communication without constant online exposure to the world resulting in enhanced security and lower bandwidth consumption.

OnDemand Comm Ports facilitate the communication between Software Versions 5.1 or 6.1 and above and Controller Firmware Versions 3214 and above.

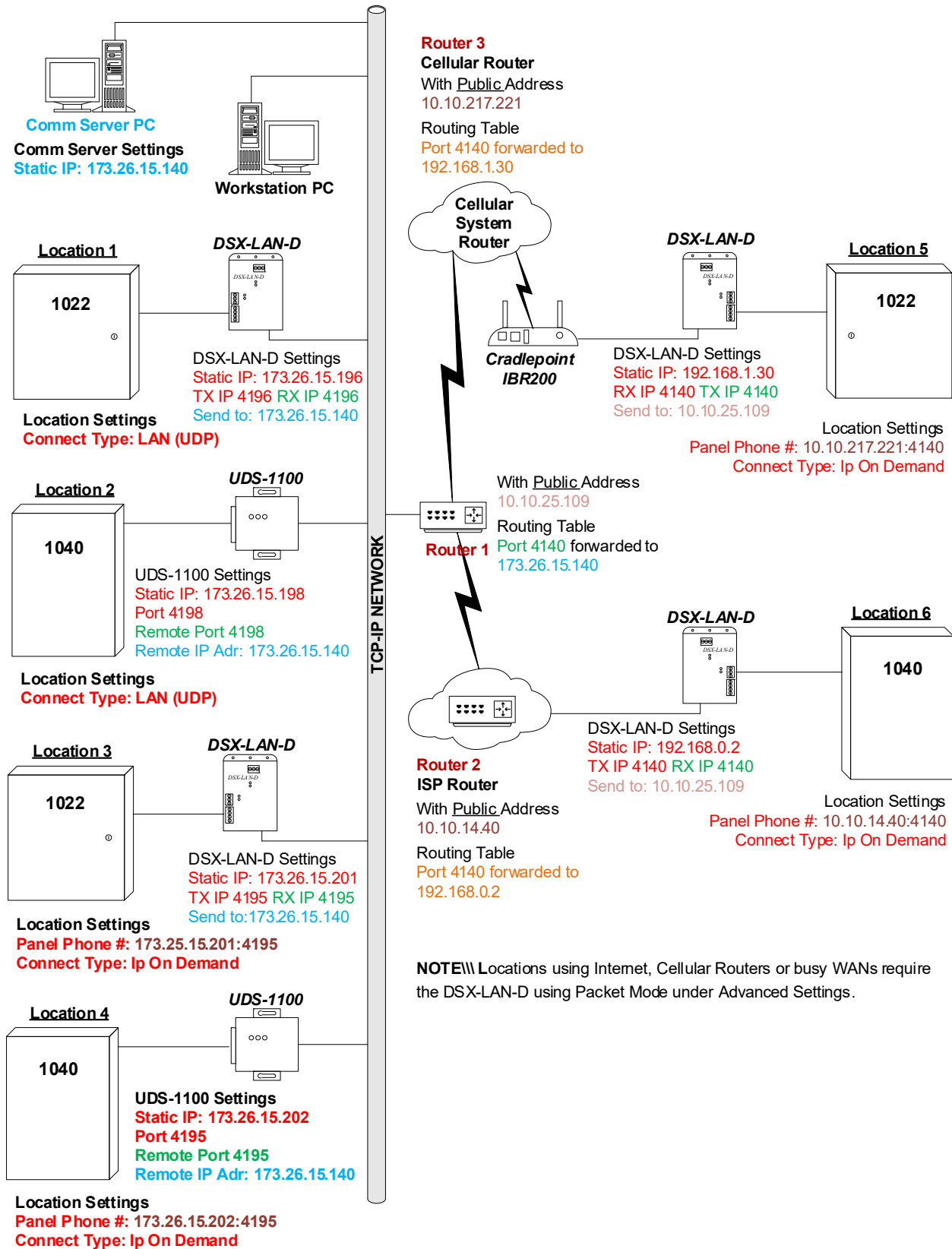
A single OnDemand Comm Port is defined at the Comm Server to transmit information to all OnDemand or a group of OnDemand Locations. Each Location is given a unique IP Address but uses the same IP Port Number. If needed, each Location can be programmed to automatically connect and interrogate (poll) the location on a routine basis. Poll Frequency is available at intervals ranging from every 10 minutes to over a month. A Timer can be set to alert you that it has stayed online too long.

Automatic connection and downloads occur each time changes are made to the database, while an operator makes changes to the Location in Workstation, and when an alarm is triggered at the Location.

In the following example, Location 1 & 2 are Standard LAN-UDP Connections. Locations 3 & 4 are OnDemand Locations operating on the same LAN as the Comm Server. Locations 5 & 6 are remote OnDemand Locations using a Cellular System and ISP Router respectively. Note that Locations 3 & 4 share the same IP Port to minimize the number of ports required to be open. Locations 5 & 6 (the remote locations) use a separate IP Port from the Internal Locations to facilitate outside communication and port forwarding. The number of OnDemand ports is not limited by DSX System Software.

IP OnDemand Typical Communications

This example shows the Comm Server communicating with Direct and IP OnDemand Locations using both DSX-LAN-D and UDS-1100. DSX-LAN-D are required for Internet, Cellular and busy WAN connections.



Comm Server Configuration

1. At the Comm Server define a new Comm Port and select the Port Type to On Demand.
2. The RX IP Port is the port that certain OnDemand Locations will be using as the TX IP Port.
3. Restart the program and or service after following these instructions and anytime you change these parameters.

The screenshot shows a 'New Comm Port' dialog box with the following configuration:

- Port #: 55
- Name: OnDemand
- Baud Rate: 9600
- Word Length: 8
- Parity: None
- Stop Bits: 1
- Poll Frequency: 0
- Message TimeOut: 2000
- Port Type: IP On Demand
- Port Used By: Comm Server
- RX IP Port #: 4140

Buttons at the bottom include: Default Settings, Previous, Next, Cancel, and OK.

DataBase Location Configuration

1. Define a Location and enter the IP Address and Port number, (of the LAN-D module at the remote site), in the Panel Phone Number field.

Syntax = IP Address(colon:) IP Port Number 123.123.123.123:1234

If this is a LAN enter the IP Address of the DSX-LAN D module at the site.

If this is a WAN or Internet connection this would be the Public IP Address of the Router at the remote site. The Router would then Port Forward to the Private IP Address of the DSX-LAN-D module.

The screenshot shows a 'New Location' configuration window with the following fields and values:

- Location #: 0
- Location Group Name: 1: Discovery Group
- Location Name: ThinkTank
- Address: (empty)
- City: (empty)
- State: (empty)
- Postal Code: (empty)
- Panel Phone #: 10.10.14.40:4140
- PC Phone #: (empty)
- Loc. Password: (empty)
- Encryption Key: (empty)
- Notes: (empty text area)

Buttons at the bottom: Previous, Next, Cancel, OK.

Note /// Once you Save the Location as an OnDemand Connect Type the system will place the Location <<<number>>> in the PC Phone number field. This must be left there and it will also be stored in the Master Controller for that Location where it is viewable with kb2c.exe.

2. On the Numeric Options Tab select OnDemand for the Connect Type. Select Auto Poll and Download and if desired set the Poll Frequency in minutes. This is how often the Comm Server Automatically connects to supervise the system and communications.

The screenshot shows a software dialog box titled "New Location" with four tabs: "General", "Numeric Options", "Y/N Options", and "Help? F1". The "Numeric Options" tab is selected. The dialog contains the following fields and controls:

- Comm Loss Action Message: [-----] (dropdown)
- Connect Type: [IP On Demand] (dropdown)
- Auto Poll & Download:
- After Hours Auto Download:
- Poll Frequency: [20] (text input)
- Modem Online Alarm (Mins): [0] (text input)
- Delay Download (Mins): [0] (text input)
- # Of Digits In PIN Code: [6] (text input)
- # Of Denied For Alarm: [0] (text input)
- # Of Missed Polls For Alarm: [3] (text input)
- Location # To Use For Echoed Alarms: [0] (text input)
- Regional Time Zone: [-----] (dropdown)
- Use Daylight Savings Time:
- Alarm Email Group: [-----] (dropdown)

At the bottom of the dialog are four buttons: "Previous", "Next", "Cancel", and "OK".

Note /// Once the Location and Comm Port are defined the system must be restarted. Exit and restart the program and if Comm Server is running as a Service (DSX Comm), restart the service.

Location Master Controller

At the DSX Controller the DSX-LAN-D module should be programmed accordingly.

1. Under the Communication Settings, set the **TX and RX Port** to match the same number programmed into the Comm Port and Location in the DataBase.

If this is a LAN the “**Send to this IP Address:**” is the IP Address of the Comm Server.

If this is a WAN or Internet connection the “**Send to this IP Address:**” is the Public IP Address of the Router at the Comm Server site. The Public Router at the Comm Server site forwards this port to the IP Address of the Comm Server.