

In:xtnd Manage – Provisioning and control system

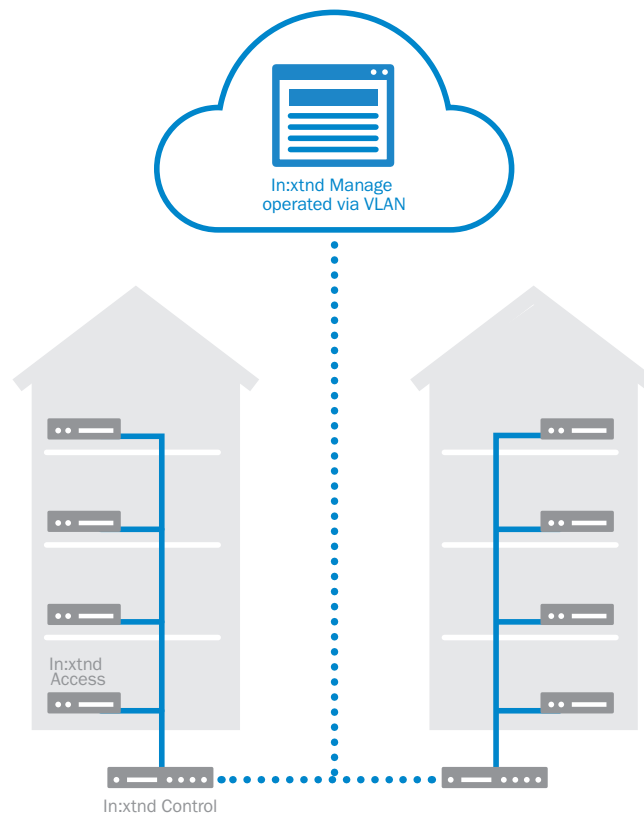
The In:xtnd Manage is an advanced element manager with features for In:xtnd Control deployment, service-based In:xtnd Access deployment, control and supervision of the coax link conditions. In:xtnd Manage includes essential functions for carrier class service provisioning and network management.

KEY BENEFITS

- Automatic element deployment
- Advanced service and policy management
- XML-SOAP interface for fast and easy third-party OSS/BSS integration
- Wide range of network statistics

Wide range of functions

In:xtnd Manage provides a wide range of functions, covering the tasks associated with deployment of In:xtnd Control service network parameters, coaxial network settings and control features as coax link performance and quality to each connected modem. Service policies defined in In:xtnd Manage are dynamically applied and enforced in the coax network by the In:xtnd Control and to each In:xtnd Access modem. The In:xtnd Manage generates information for trouble shooting and network statistics.



Element management

In:xtnd Manage automate time-consuming and demanding tasks involved in the control and provisioning of any type of services. Initial configuration is provisioned automatically by In:xtnd Manage to In:xtnd Access modems when they connect to the network, allowing mass deployment of elements.

Update of In:xtnd Control and In:xtnd Access modem firmware secures the stability of the network and reduces problems associated with multiple firmware releases. This also saves time and cost associated with on-site visits.

Service and policy management

Activation, deactivation changes in service subscriptions cause numerous updates to service profiles. In:xtnd Manage automates these tasks thereby reducing manual work to a minimum. Every change in the service subscription triggers the service profile configuration to be automatically provisioned to affected element which cuts costs in the network operation and speeds up service delivery.

Easy integration with other systems

Integration with other systems is made using the XML-SOAP interface. It provides easy access to all necessary In:xtnd Manage features interaction with the operator business critical systems. InCoax provides an XML-SOAP manual and guidelines of functionality for management of workflows, service provisioning and helpdesk.

Link Controller Statistics

Link Controller Group: Filter: Go

| Id | Location | Ethernet Ingress | Ethernet Egress | Access Modems | Ethernet Graphs | Status | Link Status |
|--------------|----------|------------------|-----------------|---------------|-----------------|--------|-------------|
| CLC_251_peja | | 2.9 Mbps | 0 Mbps | 8 1 | BW Error | Status | |

| Link | Channel | RX Error [%] | Guaranteed Rate Down | Guaranteed Rate Up | Coax Ingress | Coax Egress | Graphs | Status |
|------|----------|--------------|----------------------|--------------------|--------------|-------------|----------|--------|
| 1 | 1000 MHz | 0.000000 | 54 Mbps | 40 Mbps | 0.003 Mbps | 2.883 Mbps | BW Error | Status |
| 2 | 1150 MHz | 0.000000 | 62 Mbps | 48 Mbps | 0 Mbps | 0.005 Mbps | BW Error | Status |
| 3 | 1325 MHz | 0.000000 | 104 Mbps | 36 Mbps | 0 Mbps | 0.005 Mbps | BW Error | Status |
| 4 | 1500 MHz | 0.000000 | 24 Mbps | 10 Mbps | 0 Mbps | 0.005 Mbps | BW Error | Status |

| Link # | Access Modem | Version | RX Rate | TX Rate | Link Quality [%] | Attenuation [dB] | RX Error [%] | Uptime | Performance Graphs | Status | Ethernet |
|--------|-------------------|----------|----------|----------|------------------|------------------|--------------|------------|--------------------|--------|----------|
| 1 | 84:93:0c:cc:cc:64 | 50.5.10 | 253 Mbps | 253 Mbps | 100 / 100 | 41 / 36 | 0.000000 | 339h:24m | BR LQ RX Error | Status | |
| 1 | 84:93:0c:ff:f5:5d | 10.09.21 | 251 Mbps | 253 Mbps | 99 / 100 | 38 / 35 | 0.000001 | --- | BR LQ RX Error | Status | |
| 1 | 84:93:0c:aa:aa:aa | 50.5.19 | 253 Mbps | 253 Mbps | 100 / 100 | 32 / 36 | 0.000058 | 4h:16m | BR LQ RX Error | Status | |
| 1 | 84:93:0c:ff:f5:59 | 10.09.21 | 253 Mbps | 253 Mbps | 100 / 100 | 40 / 37 | 0.000000 | --- | BR LQ RX Error | Status | |
| 2 | 55:55:55:55:55:55 | 10.09.21 | 253 Mbps | 253 Mbps | 100 / 100 | 39 / 39 | 0.000000 | --- | BR LQ RX Error | Status | |
| 2 | 84:93:0c:05:1f:5f | 10.09.21 | 253 Mbps | 253 Mbps | 100 / 100 | 37 / 37 | 0.000001 | 83888h:04m | BR LQ RX Error | Status | |
| 3 | 66:66:66:66:66:66 | 10.09.21 | 253 Mbps | 253 Mbps | 100 / 100 | 40 / 40 | 0.000000 | --- | BR LQ RX Error | Status | |
| 4 | 84:93:0c:ff:f6:69 | 10.09.21 | 253 Mbps | 253 Mbps | 100 / 100 | 43 / 44 | 0.000000 | --- | BR LQ RX Error | Status | |
| | 84:93:0c:ff:f6:bf | 10.09.21 | 0 Mbps | 0 Mbps | / / | / / | 0 | --- | BR LQ RX Error | Status | |

In:xtnd Control RF-channel settings and accumulated utilized bandwidth

PHY speed of each In:xtnd Access modem

Attenuation to each In:xtnd Access modem

RX error of each In:xtnd Access modem

In:xtnd Access status and indication of ethernet ports connected

SERVER REQUIREMENTS

Intel x86

- Minimum: Intel Pentium 4 or newer processor
- RAM: 1 GB minimum
- Hard disk: 80 GB minimum
- OS: Ubuntu
- Database: PostgreSQL
- Web server: Apache, php, php/soap

The amount of memory and disk space required depends on the network size, amount of logging data, number of services and number of In:xtnd Control and In:xtnd Access.

About the Multimedia over Coax Alliance®

The Multimedia over Coax Alliance (MoCA®) is an industry standard alliance developing technology for the connected home. MoCA technology runs over the existing coaxial cabling, and is the in-home backbone for Wi-Fi®. Products integrating MoCA technology are found in the service provider, custom installer and consumer/retail channels.

The Alliance has more than 200 certified products and 50 members, including service providers, OEMs, CE manufacturers and IC vendors.

About MoCA Access™

MoCA Access is point-to-multipoint. It is designed to co-exist with legacy services such as TV, DOCSIS, and cellular (4G/5G) technologies. As a fiber extension technology, MoCA Access is well suited for operators and ISPs that are installing fiber-to-the-basement (FTTB) or fiber deep into the network, and want to use the existing coax for connection to each apartment or unit. MoCA Access also appeals to commercial integrators in market segments such as hospitality/hotels, restaurants, offices, and any other buildings wired with coax.



in:xtnd™

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