

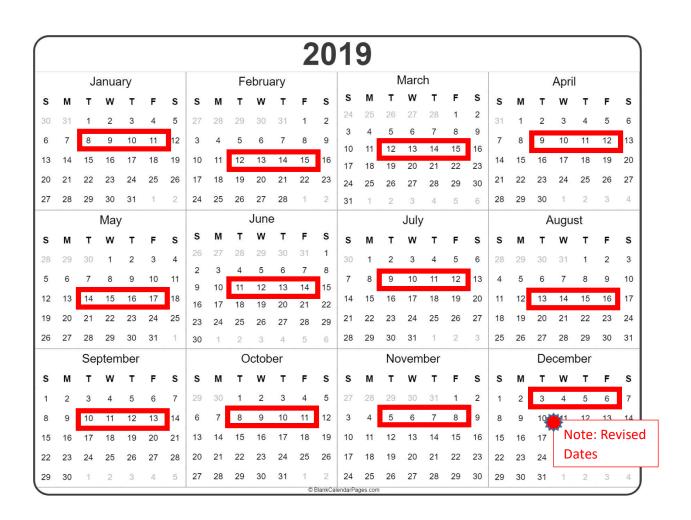


Minerva 10 & YourTV Now

2019 Online Training Schedule and Syllabus



Minerva 10 2019 Online Training Schedule





YourTV Now 2019 Online Training Schedule

												2	20	1	9												
January				February					March					April													
S	М	т	W	Т	F	s	s	М	т	w	Т	F	s	S	M	T	W	Т	F	s	s	М	т	W	Т	F	s
30	31	1	2	3	4	5	27	28	29	30	31	1	2	24	25	26	27	28	1	2	31	1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11 18	12 19	13 20	14 21	15 22	16 23	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	24	25	26	27	28	29	30	21	22	23	24	25	26	27
27	28	29	30	31	1	2	24	25	26	27	28	1	2	31	1	2	3	4	5	6	28	29	30	1	2	3	4
May				June					July					August													
s	М	T	w	т	F	s	s	М	T	W	T	F	s	s	М	I	w	т	F	s	s	М	T	w	т	F	s
28	29	30	1	2	3	4	26	27	28	29	30	31	1	30	1	2	3	4	5	6	28	29	30	31	1	2	3
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
19	20	21	22	23	24	25	16 23	17 24	18 25	19 26	20 27	21 28	22 29	21	22	23	24	25	26	27	18	19	20	21	22	23	24
26	27	28	29	30	31	1	30	1	25	3	4	5	6	28	29	30	31	1	2	3	25	26	27	28	29	30	31
September				October					November					December													
s	М	T	w	т	F	s	s	М	т	W	T	F	s	s	М	Т	W	т	F	s	s	М	Т	w	т	F	s
1	2	3	4	5	6	7	29	30	1	2	3	4	5	27	28	29	30	31	1	2	1	2	3	4	5	6	7
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	*				
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17			Revi	sed
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	Da	te		
29	30	1	2	3	4	5	27	28	29	30	31	1	2	24	25	26	27	28	29	30	29	30	31	1	2	3	4
-												0	RlankCa	lendarPa													



Minerva 10: Course Modules - Days/ Times (USA Pacific Time) (See below for YourTV Now course outline)

Minerva 10 Online Training:

Minerva Networks training courses are designed to provide your team with the knowledge they need to deploy and use the Minerva 10 system on a daily basis. Each course module is only 1 to 6 hours long and is delivered online by trained Minerva Networks experts.

Module	Day 1	Day 2	Day 3	Day 4 Friday		
Times	Tuesday	Wednesday	Thursday			
8:00AM to 9:00AM	1. M10 System Foundations & Overview	3. Customer	5 . Administration/	5. Administration/ Troubleshooting (Continued)		
9:00AM to 10:00AM	2. Channels, Lineups, Regions & Packages	Accounts	Troubleshooting			
10:00AM to 11:00AM	Break	Break	Break	Break		
11:00AM to 12:00PM	2. Channels, Lineups, Regions & Packages	4. STB Operation	5. Administration/ Troubleshooting	6. ACTools		
12:00PM to 1:00PM	(Continued)	& Client Devices	(Continued)	7. Billing and Data Extraction		

NOTE: All Times are in USA Pacific Time

Convenient online delivery: The training courses cover all of the key areas required to implement the Minerva 10 system.

Comprehensive set of modules: The training courses cover all of the key areas required to implement the Minerva 10 system.



Experienced training staff: Each of the Minerva's trainers has had at least 4 years hands-on field experience with Minerva Networks.

Course: Minerva M10 Platform Foundations Course Module 1

Module Duration - 1 Hour

Intended audience:

- Anyone who wants to get a foundational overview understanding of the M10 System
- > Server System administrators, Headend, IPTV and IT Engineers
- > Tier 1, 2 and 3
- Engineering operators
- > Tech Support personnel
- Headend Technician
- CSRs, Marketing, Sales, Management, Provisioning, Help Desk, Marketing, etc.





- Minerva Networks M10 Platform and System overview.
- What operations does the Minerva M10 server system control?
- The essentials of the Minerva BackOffice server system.
- Features and Functionalities available at the Set Top Boxes and mobile devices.
- The essentials of the Minerva Edge server system.
- M10 system architecture, components and functions.



Course: Channels, Lineups, Regions & Packages

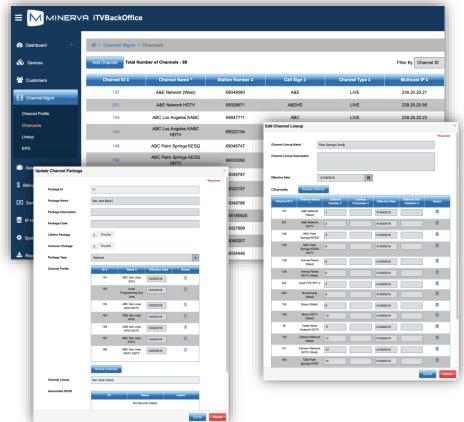
Course Module 2

Module Duration - 3 Hours

Intended audience:

- > Headend Engineers
- > Admin, Engineering, Support
- Marketing personnel
- Any person responsible for managing channels and lineups



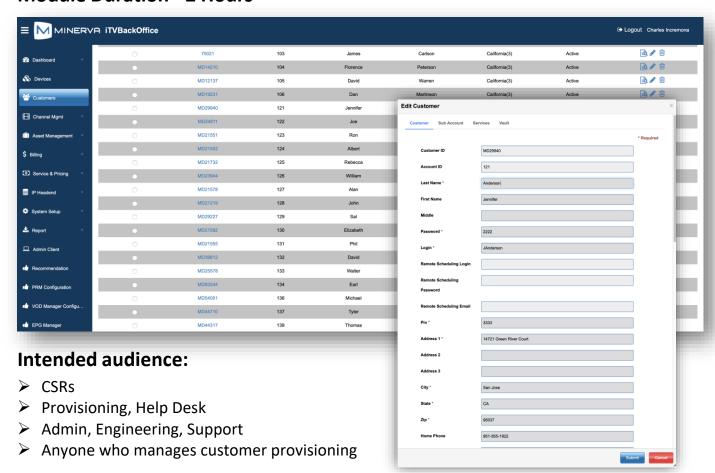


- Channels students learn how to create channels as well as associate these channels with the TV Listing data service, the multicast IP addresses and port numbers, the HLS URL values or the DASH URL values.
- Pay Per View Channels are created.
- Channel Lineups students learn how to create channel lineups with independent channel numbering for different Service Areas. Also, you will learn how different channel lineups may be useful for particular communities, campuses, etc.
- Regions you will learn how to create regions, and associate themes, channel lineups, languages, time zones and other properties.
- Channel Packages students learn how to create channel packages, how to make channel packages which cross multiple regions or which are specific to a given region.
- Service Packages Students learn how Service Packages are combinations of channel packages and other features available to the customer.
- Final review Channels, Lineups, Regions and Packages.



Course: Customer Account Creation/ Management Course Module 3

Module Duration - 2 Hours



- Customer Accounts how to add new customer accounts & edit existing ones.
- Complete explanation of customer account fields, required & unrequired.
- Activating Devices using Account ID, phone number or the Customer ID.
- Explanation of the M10 Customer ID and Account ID and which matches a Service Provider's Billing System.
- How to set up and change Parental Controls on behalf of the customer, retrieve forgotten PINs and customer password changes, block channels, set credit limits, enable or disable services, require PIN usage, logins, limit the number of STB devices and mobile devices, etc.
- Assigning Services Service Packages, Channel Packages, User Services & Mobile.
- Activating, deactivating & deleting customer accounts.
- How to locate/track Device IDs within the M10 system and delete devices so they can be activated to another customer account.



Course: STB, Client Devices/ End User Experience Course Module 4

Module Duration - 2 Hours

Intended audience:

- > Installers, Technicians
- > CSRs
- ➤ Help desk
- Administration
- > Headend Engineers
- Marketing, Sales, Management
- Anyone wanting an understanding of the end user experience.

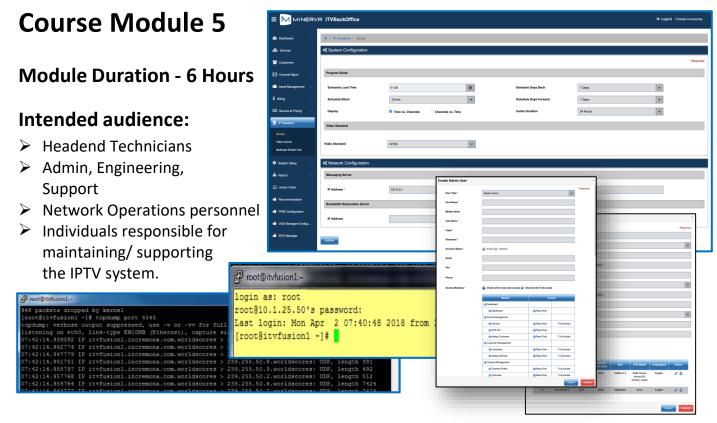
Urs | Part | Pa



- Overview of the Minerva 10 screens and operations across multiple devices (Set Top Boxes, mobile phones, tablets, PC/Mac and Amazon Fire TV).
- Activation process for STBs and other client devices, booting, etc.
- Explanation of the Home Screen and the stripes at the Set Top Boxes.
- The various Guide views explained and demonstrated.
- User initiated TV remote control commands explained & demonstrated (guide, menu, info, red, green, yellow, blue, arrow keys, etc.).
- The Info bar explained.
- Searching through the guide demonstrated.
- Parental Controls, overriding from the menu, unlock, etc.
- Adding programs and series to customer Favorites as well as creating Favorites lists, editing and using multiple Favorites list.
- Sub-Accounts and Set Top Box Logins.
- DVR operation, Restart TV, Catchup TV, VOD operation, ordering, etc.
- Customer initiated account changes using the TV remote control (blocking channels from the home, changing the account password/PIN, changing Parental control levels, etc.).



Course: Administration & Troubleshooting



- M10 BackOffice and Edge system core architecture and components fully explained.
- The Edge Panel screens, alarms, events, and the Kibana dashboard.
- Advanced M10 BackOffice administration screens and configurations.
- Both methods of operation (HLS Unicast and multicast) operation will be explained.
- The Dispatcher functionality will be explained and demonstrated.
- Configuration of the multicast control (Runtime and Message) streams as it relates to system requirements as well as the boot streams within the M10 BackOffice.
- Using the tcpdump command to troubleshoot the M10 BackOffice & Edge servers.
- Using the tail command to watch logs & troubleshoot problems within the BackOffice & Edge systems. Finding root causes of failures.
- Checking, starting and stopping WebLogic, appropriate Linux commands and directories, troubleshooting.
- Linux login, cron jobs, log files, process management (DB Backup Loading EPG data)
- Adding new admin users.
- Triggering a Cold start from the Edge Panel and checking log files for successful operation.

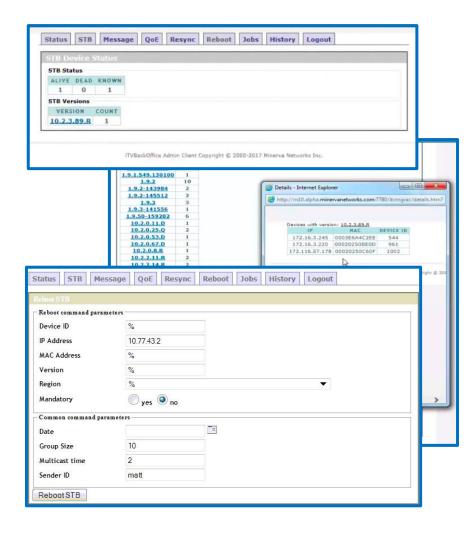


Course: ACTools Course Module 6

Module Duration - 1.0 Hour

Intended audience:

- Headend Engineers
- Admin, Engineering, Support
- Network Operations personnel Individuals responsible for maintaining/ supporting the IPTV system.



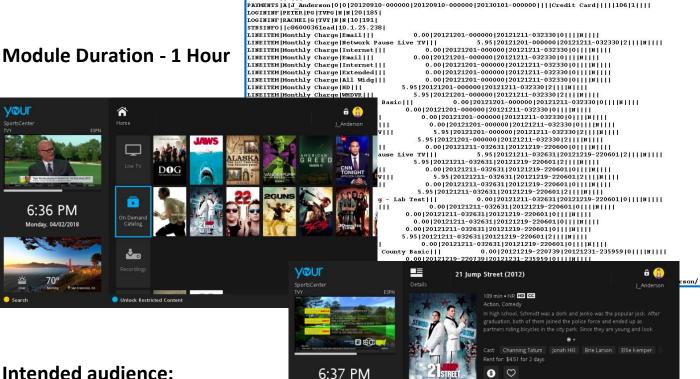
- How to enable user access to the ACTools functionality.
- Logging into the ACTools functionality.
- The Admin Client/ ACTools Interface
- Overview of the ACTools Tabs
- STB Status, "alive" versus "dead" nomenclature, the meaning of the version parameters listed in the various screens.
- Tracking devices/ device IDs within the ACTools tab as well as within the Devices tab of the BackOffice admin screens
- Troubleshooting scenarios
- Running and stopping jobs
- Resyncing & Rebooting STBs
- Filtering by region, wildcard, Device ID, Mac Address, etc.
- The History Tab



Course: Billing and Data Extraction

Course Module 7





ease enter your Master PIN and press OK to rent the selected asset

HD 21 Jump Street, 2012 for \$4.51 for 2 days

| STOMER|MD13112|Jason||Anderson|20120910-000000|20120910-000000|1427 Chestnut Street|||Lake Elsinore|CA|92532|

15554777||||||| PAYMENTS||A|J || Anderson||0||0||20120910-000000||20120910-000000||20130101-000000|||||Credit Card|||||106||1||||

Intended audience:

- > IT Engineers or computer system administrators in charge of servers
- Marketing
- Accounting
- Admin, Engineering
- Tech Support

- Recurring and non-recurring charges as they relate to M10 and a Service Provider's billing system.
- Billing files Extraction, delivery and usage
- Minerva 10 billing reports within the scheduled cron jobs of M10
- Technical differences between the TAB format and the ARB format
- Using the TAB format for inventory and verification matching to your billing system.
- Using the M10 system to create invoices and access incurred customer charges.
- How to identify charge reversals within the M10 system.



YourTV Now: Course Modules - Days/ Times (USA Pacific Time)

YourTV Now Online Training:

Minerva Networks training courses are designed to provide your team with the knowledge they need to operate their YourTV Now system on a daily basis. Each course module is only 1 to 6 hours long and is delivered online by trained Minerva Networks experts.

Module	Day 1								
Times	Monday								
8:00 AM to 10:00 AM	1. Module YTVN 1. – YourTV Now Customer Accounts and Devices								
10:00 AM to 11:00 AM	Break								
11:00 AM to 1:00 PM	2. Module YTVN 2. – YourTV Now Sub Operator Administration								

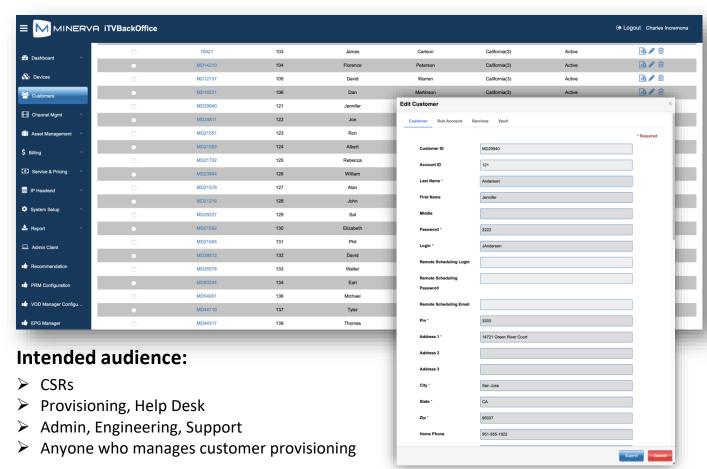
Convenient online delivery: The training courses cover all of the key areas required to operate the YourTV Now system.

Comprehensive set of modules: The training courses cover all of the key areas required to operate the YourTV Now system.



Course: YTVN Customer Accounts and Devices Course Module YTVN 1

Module Duration - 2 Hours



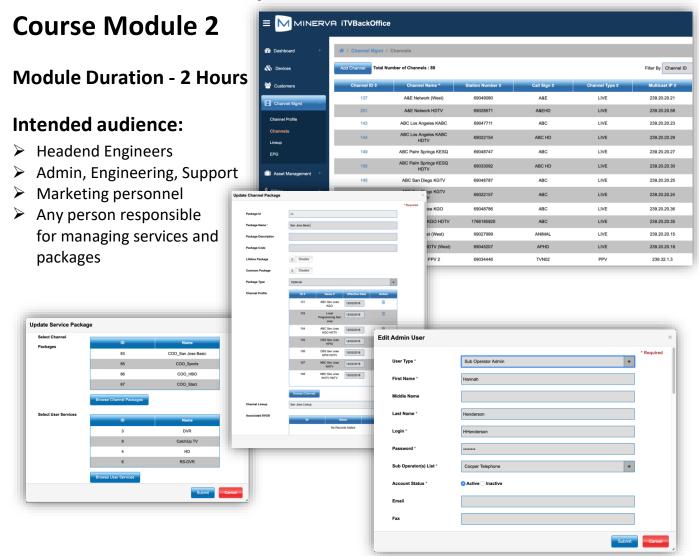
What you will learn in this module:

- Customer Accounts how to add new customer accounts & edit existing ones.
- Complete explanation of customer account fields, required & unrequired.
- Activating Devices using Account ID, phone number or the Customer ID.
- Explanation of the M10 Customer ID and Account ID and which matches a Service Provider's Billing System.
- How to set up and change Parental Controls on behalf of the customer, retrieve forgotten PINs and customer password changes, block channels, set credit limits, enable or disable services, require PIN usage, logins, limit the number of STB devices and mobile devices, etc.
- Assigning Services Service Packages, Channel Packages, User Services & Mobile.
- Activating, deactivating & deleting customer accounts.

How to locate/track Device IDs within the M10 system and delete devices so they can be activated to another customer account.



Course: YTVN Sub Operator Administration



- Creating and administering Admin Users and setting permissions.
- Channel Packages students learn how to create channel packages.
- Service Packages Students learn how Service Packages are combinations of channel packages and other features available to the customer.