HowTo 01 - Setting up an Intinor system

From DHCP to static IP and management via web browser

Power up the system with no RJ45 / ETH-cable connected yet

• Confirm you are in DHCP – dynamic IP address mode (we ship in DHCP-mode)

Push:green button on front panelNavigate to:networkStep down:Dynamic IPConfirm:push green button to activate DHCPConfirm:push green button

O Connect the RJ45-LAN cable to IP1

• Switch to a static IP (needed for Direkt router/receiver NAT / port-forwarding, DMZ etc. Dirket Link encoders may stay in DHCP)

Push:	green button
Navigate to:	network
Step down:	Static IP
Enter:	IP-address, subnet, gateway, DNS (e.g. 8.8.8.8)
navigate:	up+down for "digits", left+right for "position", green to confirm
go to :	Activate "Static IP" + confirm
Connect:	connect the RJ45-LAN cable to IP1
Go to:	network
Navigate:	current IP – is it OK?
Navigate:	Test internet conn. + confirm

Open browser interface locally (your PC must be in the same LAN)

Open:	browser
Туре:	https://IPaddress
Enter:	admin / 1234

Get an online session via skype or teamviewer Skype: martin.weberatintinor

Or call +49-176-231 322 65

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martin.weber@intinor.se sales manager europe





IP1

IP₂



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For more information please visit http://www.intinor.com



HowTo 02 – Get started - Ports to be opened – Access ISS

Please show this to your IT-department before getting started

Before going WAN using ISS Intinor **S**tream **S**atistics to remote manage units some ports need to be opened to allow communication.

• Get these ports opened by your IT-department before using a Direkt router or receiver:

Upgrades ISS Streams	TCP TCP Both	9022 22017 any	outgoing outgoing TCP+UDP	upgrade-direkt.intinor.se iss.intinor.se e.g. UDP and TCP port 6010/6020/6030 etc. forwarded to a specific static IP
RTMP	ТСР	1935		for any webcast/RTMP-ingest/pull

O If you can manage the router settings yourself

go to:	web interface of router
enable:	NAT / port forwarding if needed
forward:	incoming ports 6010/6020/6030 etc. to the static IP of e.g. your Direkt router/receiver

6 Using ISS

Browser:	iss.intinor.se
Enter:	login + password
check:	there is no " red http " showing in ISS
	in case yes = please open port 22017

Get an online session via skype or teamviewer

Skype: martin.weberatintinor

Or call



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TP-LINK° Status Quick Setup Virtual Server Network **Dual Band Selection** Service Port IP Address Internal Port Protoc Wireless 2.4GHz 6010-6019 192,168,1,109 6010-6019 TCP or UI Wireless 5GHz **Guest Network** Add New Enable Selected Disable Selected Delete Selected DHCP **USB** Settings Re S NAT Forwarding - Port Triggering - DMZ Network monitoring: Erding test (Martin) INTINOR 2015-09-30 09:07:04 Common Se Logged in as: Intinor - Log out Intinor support: +46-(0)90-3493905 Network | Units | 4-wire talkback groups | User | Streams | System settings Show last 10 min 🗸 update Network status 08:56:59-09:06:59 Permalink Direkt link 400SDI /589 (SALES STATIONARY) 0/0/0 08:59:59 09:01:59 09:03:59 09:05:59 08.57.50 Direkt link 400SDI x2 /586 (Martin loaner) 0/0/0 08:59:59 09:01:59 09:03:59 09:05:59 Direkt router 2000IP x6 /215 (Martins eval router) 🔳 (188.193.209.84 / 192.168.1.109) 2/2/0 IP stream in 2 2/0/0 IP stream in 3 2/0/0 IP stream in 4 2/0/0 IP stream in 5 2/0/0 **IP** stream in 2/0/0 SDI out 2/0/0 2/0/0 SDI out 2 08:59:59 09:03:5 No errors: Few errors: Many errors: Very many errors: Node not connected: Input signal missing: Warnings: More info about quality levels Edit alarm settings for network Admin functions: edit network delete network

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For more information please visit

http://www.intinor.se/en/

http://www.intinor.se/en/products/direkt-router/

I St DP En	atus abled	Edit	_
ervice Port P Address	: 601 : 192	10-6019	(XX-XX)
ternal Port	: 601	10-6019	(XX or keep empt
Status	Ena	abled	•
ervice Port	: [P	lease Select	

HowTo 03 - How to do a DMZ (get an external IP address)

Make sure you have changed the password

Please read about the concepts for a DMZ https://en.wikipedia.org/wiki/DMZ_%28computing%29

Why would you want an Intinor system to be in a DMZ?
1) Direkt Link encoders allow "TCP-requests – no port-forwarding needed
2) Direkt Routers / receivers can receive streams with no port forwarding needed
Good the evaluations, demos and testing to avoid IT-issues.
As the unit is available on the internet you need to change the password from

"1234" to a "more secure" password

Assign a static IP to you Intinor system

front panel:	go to network
Go to:	Static IP (if you see a * / star go to current IP to read out the IP
Enter:	IP, subnet, gateway and DNS (8.8.8.8) and confirm
check:	go to Current IP to confirm your settings are correct.

Check your WAN-IP address

browser:	https://www.whatismyip.com/
example:	188.195.162.202
Router:	go to status of your router (you will see the same WAN IP-address)
ISS:	go to ISS (WAN IP-address + internal IP address)

Open the router management browser interface

open:	192.168.1.1 (just an example)
go to:	Forwarding / DMZ or similar
Assign:	assign a DMZ to the static IP of your Intinor system (192.168.1.109)
Broswer:	open your intinor system via external IP: <u>https://188.195.162.202</u>

Get an online session via skype or teamviewer

Skype: martin.weberatintinor

Or call +49-176-231 322 65

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martin.weber@intinor.se sales manager europe







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HowTo 04 – How to access the unit – part #1

Make sure you have changed the password

There a several ways to remote control the unit – see the next pages for all options

• via ISS = Intinor Stream Statistics

http://intinor.com/products/iss-intinor-stream-statistics/

please search for an email labeled "[ISS] ISS user assigned" - you will see:

url: iss.intinor.se vour email address login: generated by ISS password:

the ISS-system-admin will see your request to remote control the unit and has to approve this via the ISS-GUI or via front-panel of a given unit – this is a security feature. For "direct access without confirmation" system-administrators can submit a list of email-addresses and users. This can be done "per unit" with user-rights such as "admin, operator, oberserver".

User rights per unit: Please change default-admin = admin:1234 to a new password create individual user-specific logins+passwords

when clicking on remote control icon a) when icon is red: user needs approval by administrator b) when icon is green: user has rights to remote access with his personal login+password – also see HowTo #01

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martin.weber@intinor.se sales manager europe



Network monitoring: Martin evaluation delay test

2020-02-26 09:23:19

Logged in as: Intinor - Log out - [Drop admin] Intinor support: +46-(0)90-3493905

update Show last 10 min 🗸

Network status 09:13:15-09:23:15



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HowTo 05 – How to access the unit – part #2

Make sure you have changed the password

There a several ways to remote control the unit

2 Via static IP

covered in HowTo #01

• Via IP2 in management mode

The ETH-port "IP2" per default is in management mode, allowing you to use an ETHcable to connect your latop to IP2 on the back of the unit and receive an IP-address when you laptop is in dynamic mode. Pleasse note there is a DHCP-server behind IP2 when used in management mode. Never connect to your LAN to avoid conflicts. front panel: read-out the current IP for IP2 (which might be 172.50.99.1) Browser: enter: <u>https://172.50.99.1</u> GUI: enter login+password

when there is no front-panel on a system such as Direkt router lite

Windows:use the Windows "command promt" or similarenter:ipconfig + hit "ENTER"read-out:IP-address of laptopBrowser:IP-address ending with xxx.xxx.1

Via IP2 when in static mode

front panel:read-out the current IP for IP2 (which might be 192.168.1.x)Browser:enter: 192.168.1.x

• Via external IP with https = 443 port forwarding

a port 443 forwarding to the static IP of a system must be enabled in the "IP-router" Broswer: enter "https://external-IP"

Get an online session via skype or teamviewer

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Or call +49-176-231 322 65

All the best

martin.weber@intinor.se sales manager europe





Microsoft Windows [Version 10.0.18362.657] (c) 2019 Microsoft Corporation. Alle Rechte vorbehalten.

C:\Users\Mart<mark>in>ipconfig</mark>





HowTo 06 - How to "pull / request" a stream using TCP or SRT protocol *Monitor your streams from a PC or Laptop/smartphone*

Intinor provides a Direkt Router with an external IP address on 213.115.198.66 to "pull a stream via TCP or SRT" protocol. **There is content playing for you 24/7/365.**

• With VLC

open: network stream Copy+Paste: tcp://213.115.198.66:7150 srt://213.115.198.66:7152

Requesting/pulling a stream via TCP or SRT protocol is allowed in most networks. Therefore "requesting a stream via TCP/SRT" is **an easy way to test.**.

O With Direkt router or Direct receiver

open:	browser interface
Enter:	login + password
Go to:	Active Settings
Go to:	IP stream in 1
check:	Provide a construction of the second state
	SRT is a paid option/license use port 7152
confirm:	by hitting return-key or scroll down and push the button
Go to:	8 show inputs status to see a thumbnail of the stream
	(this is a feature that needs multiview or an encoder to be enabled)

You may not just pull a test strteam from an Intinor-hosted Direkt router in sweden, but your own Direkt link encoder/receiver/router too. Please activate as seen in the screenshot

• Output on SDI#1 or SDI#2

when you have a Direkt receiver / router (Direkt router needs to have an SDI-card)

Get an online session via skype or teamviewer

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Or call +49-176-231 322 65

All the best

martin.weber@intinor.se sales manager europe



🛓 Open Media	– 🗆 X	
🗈 File 💊 Disc 👫 N	work 😇 Ca 🛓 Open Media —	×
Network Protocol		
Please enter a network URL:	Elle 🐨 Disc 👕 Network 😂 Capture Device	
srt://213.115.198.66:7152	Network Protocol	
http://www.example.com/strea	Please enter a network URL:	
rtp://@:1234 mms://mms.examples.com/stre	n.asx tcp://213.115.198.66:7150	~
rtsp://server.example.org:8080 http://www.yourtube.com/wa	st.sdp http://www.example.com/stream.avi ?v=gg64x ====================================	
	ms://ms.examples.com/stream.asx	
	http://www.yourtube.com/watch?v=gg64x	
Show more entires		
_ Show more options		
	Show more options	
		 Cancel
Input Sources		
	UDP unicast port: 6010 input: IP1	~
	UDP multicast address: 224.1.1.1 port: 6010	
	SRT (request) ad ress: 213 115 198 66 port: 7052	
	port: 0010	
	TCP (request) ad ress: 213.115.198.66 port: 7050	
Access control	no can transmit to this input cocket	
Access control on: every	ie can transmit to this input socket.	
Allow	IP address or key for sender Serial number Description	Active Remove
		New
Destinations		
Stream to	Destand TD address Date Description A	ative Demove
	Protocol IP address Port Description A	ctive Remove
		New
Charam DTND		
Stream KIMP	Add new RIMP stream	
TCP on request	Active:	
	From port: 5010	
	From port: 5010	
SRT on request	From port: 5010	
SRT on request	From port: 5010	



HowTo 07 – getting prepared for 24/7 Assign alarms in ISS

There a several ways to remote control the unit

• Via static IP

covered in HowTo #01

2 Via IP2 in management mode

The ETH-port "IP2" per default is in management mode, allowing you to use an ETHcable to connect your latop to IP2 on the back of the unit and receive an IP-address when you laptop is in dynamic mode. Pleasse note there is a DHCP-server behind IP2 when used in management mode. Never connect to your LAN to avoid conflicts. front panel: read-out the current IP for IP2 (which might be 172.50.99.1) Browser: enter: <u>https://172.50.99.1</u> GUI: enter login+password

when there is no front-panel on a system such as Direkt router lite

Windows:use the Windows "command promt" or similarenter:ipconfig + hit "ENTER"read-out:IP-address of laptopBrowser:IP-address ending with xxx.xxx.1

Via IP2 when in static mode

front panel: read-out the current IP for IP2 (which might be 192.168.1.x) Browser: enter: 192.168.1.x

• Via external IP with https = 443 port forwarding

a port 443 forwarding to the static IP of a system must be enabled in the "IP-router" Broswer: enter "https://external-IP"

Get an online session via skype or teamviewer

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Or call +49-176-231 322 65

All the best

martin.weber@intinor.se sales manager europe



Network monitoring: Martin_evaluation_delay test

2020-02-26 09:23:19

Logged in as: Intinor - Log out - [Drop admin] Intinor support: +46-(0)90-3493905

Network | Units | 4-wi

Show last 10 min v update
Network status 09:13:15-09:23:15

Direkt route	[<mark>]</mark> (<u>95</u>	5.91.239.5	<u>6 / 192.10</u>			
Enc 1 - PC	iM:			1		
Enc 2 - Muktivie	09:14:15	5 09:16:15	09:	18:15		
	No errors	Few errors:			Many	
 Encoder 2: Enc 2 - Muktiview LL encodes Multiview (3.2 Mbps) HDMI out: Input signal missing 						
Alarm	(no active al edit alarm se	arms) ettings				
Remote control	remote cont	remote cont Hardware alarm				
Edit	<u>edit</u>	the unit is not behaving correctly.	leaches the t	emperature an	ann chreshnold	
Unit info	unit info	Hardware alarm	active:			
Debug dump	Create and	Temperature alarm thr	eshold:	75	°C	
		Threshold for temperature alarm rec	overy:	65]•c	
		Fan alarm thr	eshold:	100	RPM	
		Threshold for fan alarm rec	overy:	500	RPM	
		Memory alarm thre	eshold:	5	% free	
		Threshold for memory alarm rec	overy:	10	% fre	
		Email add	resses:	support (comma se	@intino_se, eparater list)	

Telephone numbers for SMS messages: (comma separated lis Send message when alarm is reset:

Connection alarm

Alarm is triggered when the ISS server has not had any contact with the unit during the cor reestablished and been active for the specified time period.

Connection alarm active:	
No connection time period to set off alarm:	10 m
Connection reestablished time period for alarm	5 m

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	2
Search:	╣
e talkback groups Users Streams System setting	<u>]S</u>
Permalir	ık
<u>168.0.18</u>) 1 alarms! 0/0/0	
Remote control	
verrors: Very many errors:	
Inected:	
_	
_	
old, if any of the units fans spins slower than its threshhold, or if a harddrive in	
Test	
, ENTER YOUR OWN EMAIL-ADDRESS	
t)	
figured time period. The alarm will be reset when a connection has been	
Test	
ninutes	
ninutes	

HowTo 08 – assigning user rights User rights per system

0 administrator password

please go to system-password

2 user rights per user

please go system-users assign individual password per user assign individual rights per user

when a project is finished or when a user leave the organisation you can easily delete the user.

Get an online session via skype or teamviewer Skype: martin.weberatintinor

Or call +49-176-231 322 65

All the best

martin.weber@intinor.se sales manager europe



Via ISS as admin Direkt router rack x6 /D00810 (ready for KASAT too) Change password
Router panel Video mixer Status Active settings Profiles System Support Files
System settings Firmware Data costs Password Users
Now processed for 'admin'
New password:
Verify new password:
Old password for 'admin'
Your old password:
Change password

Via ISS as admin

Direkt router rack x6 /D00810 (ready for KASAT too)

Add new user

Router panel Video mixer Status Active settings Profiles System Support Files

System settings Firmware Data costs Password Users

Add new user

Username:		
Password:		Verify password:
Main role:	user v 🛈	•
User permissions	:	
Media bank:	user v 🛈	
Recording:	user v 🛈	
Test picture:	user 🗸 🛈	
Encoding settings:	user 🗸 🛈	
SDI in 1:	video administrator $ \smallsetminus $	0
SDI in 2:	video administrator $ \smallsetminus $	0
IP stream in 1:	video administrator $$	0
IP stream in 2:	video administrator ${\scriptstyle\lor}$	0
IP stream in 3:	video administrator $$	0
IP stream in 4:	video administrator $$	0
IP stream in 5:	video administrator $$	0
IP stream in 6:	video administrator $$	0
Video mixer:	video administrator 🗸	1

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Test picture: off