

USER MANUAL

EK CAST 280053

Chromecast™ devices management server.

V05

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Introduction.

Description.

EK CAST server is a Chromecast[™] device management server for both, physical and integrated ones in televisions (check for implemented models).

EK CAST improves the multimedia entertainment experience of guests in the hotel room, allowing them to enjoy both their own multimedia content and those of their Streaming providers on the television.

Main features.

• Flexible configuration of the guest user interface shown on the television which allows to configure logos, colours, background, weather information and pictures or videos carrousel with customized text messages as a digital signage system.

• Configuration of the maximum number of users which can be linked to the same Chromecast™ device.

- Configuration of the terms and privacy policy.
- Configuration of domain and HTTPS
- Automatic and manual detection of new Chromecast™ devices in the network.
- Status monitoring of Chromecast™ devices.
- Remote activation and deactivation of Chromecast™ devices.
- Option to unlink user devices from the Chromecast™.
- Option to arrange the Chromecast™ devices by groups.
- Real-time information about the number of users connected to each Chromecast™ device, about the contents which the guests are reproducing and the loaded applications.
- Usage report generation of last 7 days in PDF format.
- Exportation of raw data in CSV or XLS format for subsequent analysis for marketing purposes.
- It allows to load an external customer created webpage into Chromecast™ by entering its url in the system.
- System is able to support Chromecast™ integrated in TV sets (check for implemented models).

Contents.

V1:

- 1. 1 x EK CAST.
- 2. 1 x 1 x Power cord.

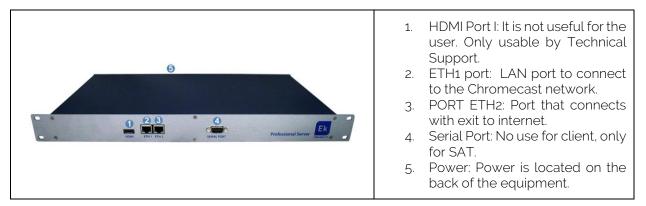
V2:

- 1. 1 x EK CAST.
- 2. 1 x 1 x Power cord.

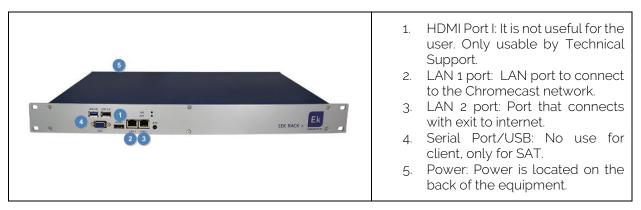
Interfaces, connection and access to the equipment.

Interfaces.

V1:



V2:





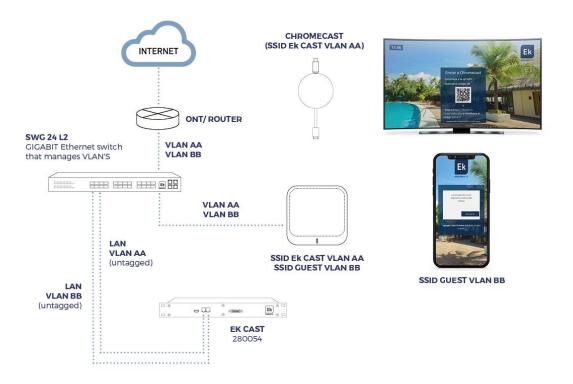
Connection.

It is mandatory, in order to install the EK CAST service correctly, to take into account that the network must be ready to manage the mDNS traffic properly and not block it.

The WAN port (LAN2/ETH2) should be connected to the main network with Internet connection. The LAN port (LAN1/ETH1) should be connected to the network where the Chromecast™ devices will be connected. The main network and the Chromecast™ network must be completely separated by means of two VLANs with the following requirements:

• The first VLAN (VLAN BB in the below picture) could be the native VLAN, it should be available in the WAN port of the equipment, and it must have Internet connection. It is also needed a DHCP server in this VLAN which will provide IPs to all the devices of the guests (PCs, tablets and mobile phones).

• The second VLAN (VLAN AA in the below picture) should be available in the LAN port of the equipment. It is also needed a DHCP server in this VLAN (the equipment is able to work as a DHCP server) and it must have Internet connection; this DHCP server will provide IPs to all Chromecast™ devices managed by the EK CAST. Only the Chromecast™ devices should connect to this VLAN.





Access to the equipment

1. Connect the ethernet port of the PC which will be used to configure the EK CAST with the WAN port of the **EK CAST**. In the EK CAST there is a sticker with its IP address, usually **172.16.5.209**. Configure the PC network adapter with a static IP in the subnet that the EK CAST, for example **172.16.5.10**. This step can also be done connecting the PC in the same switch which the EK CAST is connected to; both the PC and the EK CAST should be connected to ports assigned to the same untagged VLAN.

Protocolo de Internet versión 4 (TCP/IPv4) Properties				
General				
You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.				
Obtain an IP address automatical	ly			
O Use the following IP address:				
IP address:	172 . 16 . 5 . 200			
Subnet mask:	255.255.254.0			
Default gateway:				
Obtain DNS server address auton	natically			
Use the following DNS server add	resses:			
Preferred DNS server:	· · · ·			
Alternative DNS server:				
Validate settings upon exit	Advanced			
	OK Cance			

2. Open the EK CAST assigned IP address adding the port number 9090 in a web browser. For example, if the EK CAST address is 172.16.5.209 the URL to write in the browser will be http://172.16.5.209:9090.

Ekselans by	
EK NetworkC	onfigurato
Sign in to get access to	Internet service
User	1
Password	a
English	•
	Sign In

3. Enter the default user and password: admin / password

Equipment configuration

An IP address in the WAN interface of the EK CAST must be configure within the main network. This will allow the access to the server from the main network and the remote update of the equipment. EK CAST must have an internet connection to work properly.

Once logged in the equipment, the following screen will be shown:

EKNetworkConfigurator	= 1	2 admin - 3 English -	V3.1
•C Settings 6 ~ • Edit Network Config • • Reboot System • Shutdown System • Network Restart	Running 6 Serial Number Serial Number 7		-
	Actions 8 Reboot System Network Restart		-
	Network Configuration 3 Mode: Wanual IP Address: 192,168,20.26 Netmask: 252,525,255,05 Gateway: 192,168,20.234 Main DNS Server: 8.8.48 Secondary DNS Server: 8.8.44		-

1. Drop down button: it allows to show or to hide the settings in the left menu.

2. **User**: user used to login in the current session. It is important not to lose the password because only the "admin" user can change the password of all the users.

- 3. Language: current language selected for the Network Configurator user interface manager.
- 4. Version: current version of the Network Configurator tool.
- 5. **Status**: it shown the EK CAST status. When the status is "Running" it means the EK CAST is running perfectly; if another status is shown, connection and network configuration should be reviewed.
- 6. Settings:
- Edit Network Config: it allows to set the network configuration parameters.
- **Reboot System:** it reboots the equipment.
- Shutdown System: it switches off the EK CAST gracefully. This is the correct way to switch off the equipment.
- Network restart: it restarts the network ports.
- 7. Serial number: Serial number or license number assigned to the equipment.
- 8. Actions: Direct access to the operations available in the Settings menu.
- 9. **Network Configuration**: it shows the current network configuration. In order to configure the equipment to work in a network, the next steps should be followed:
- 1. Select "Edit Network Config" in the left menu.



EKNetworkConfigurator	=	admin 🔻	English 🗸	V3.1
og Settings ~	Running			
Edit Network Config Reboot System Shutdown System	Serial Number			-
O Network Restart	Serial Number: EK-CST01000000001			
	Actions			-
	Reboot System Skuldown System Hetwork Restart			
	Network Configuration Mode: Namual IP Address: 125.162.0.26 Netmask: 255.255.235.0 Gateway: 192.168.20.254			1
	Main DNS Server: 8.4.4.8 Secondary DNS Server: 8.4.4.4			

2. Configure an IP inside the local network, with the right subnet mask and gateway in order to provide Internet connection to the equipment. Once all these parameters are configured, press the Save button to save configuration. The following picture is just an example, the parameter values should be adapted to each local network configuration.

Network Configuration	×
Manual	
IP Address	
192.168.20.26	
Netmask	Gateway
255.255.255.0 2	192.168.20.254 3
Main DNS Server	Secondary DNS Server
8.8.8.8	8.8.4.4
Save 4	

3. Accept configuration

EKSELANS BY ITS

① 192.168.10.26:9090

A wrong network configuration can cause the system to be unnacesible. Do you want to proceed with the changes?



4. Once configured the network parameters of EK CAST, connect PC again to the main network enabling DHCP or setting manually the previous IP address, netmask and gateway. Then, connect the EK CAST WAN port to the main network. Now the EK CAST will be accessible through the IP address configured in step 2.

If the configuration is properly done, after some minutes, on the main window, the "Running" word and the green colour will be shown in the Status area.

EKNetworkConfigurator	≡	admin 🔻	English 🗸	v	/3.1
Oc Settings > O Edit Network Config O Reboot System O Shutdown System O Network Restart	Running				
	Serial Number Serial Number				-
	Actions Reboot System Shutdown System Network Restart				-
	Network Configuration Mode: Manual IP Address: 192.168.20.26 Netmask: 252.255.255.0 Gateway: 192.168.20.254				-
	Main DNS Server: 8.8.8.8 Secondary DNS Server: 8.8.4.4				
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Access to the configuration interface and general view.

Access to the configuration interface

After the system is properly configured and running, it is possible to access to the configuration interface of the EK CAST in the URL <u>https://<configured IP>/manager</u>. For example, https://172.16.5.209/manager.

	Ekselans by its	
	EK Cast	
	Sign in to start your session	
User		1
Password		
English		
		Sign In

User: admin Password: Admin123.



Main Information.

It includes all the information related to the CPU, memory, network bandwidth, logged user, language and SW version which is shown on the top of the main window.

Ek EKCast	= 1	Mem: 40.1% Cpu: 0.8%	Network Sent: 4.8 Kbps admin + English +
MANAGEMENT	Main Configuration	2	3 4 5 6
	Enable captcha at login	Look and Feel	Widgets
CAST MANAGER	Site name	Default Langunge Español	None Image Slideshow
Main Configuration	Ekselans	Main Colour atb3666	Videos playout
im Statistics <	Use external URL for cast devices External URL	Text Colour	Weather information
		witter	Copyright
	Max. simultaneous paired users 4	Show Name	<strong=copyright ©="" 2021="" <a="" href="https://ek.plus">HTS Partner (0.8.5) 5.L. All rights reserved.</strong=copyright>
	✓ Enable automatic daily unpair	Show Logo Background Colour Rd5dadb	PMS é
	Time 12:00:00 ©	Background Image	Enable PMS connection
	Ticket Type		PMS user
	Numeric Alphanumeric Ticket Length	Ek 🚥 💓	PMS password
	6 Terms and Privacy	EXECUTION BY ITS Change Logo Change Icon Change Bg Image	
	Edit Privacy		
	KUIK VIITIIN KUIK VIITIIN KUIK VIITIIN KU		Save
	Copyright © 2023 ITS Partner (0.B.S) S.L. All rights reserved.		

- 1. Drop down button: it allows to show or to hide the left menu.
- 2. **Mem**: it shows the current memory used by the system.
- 3. **CPU:** it shows the total CPU load and the load of each core.
- 4. **Network:** it shows the current network traffic.

5. Admin: this menu shows the current version of EK CAST and allows to modify the password of the current user and to logout.



6. **Language**: it allows to select the language used in the EK CAST user interface manager.



Management.

It is possible to modify the network configuration of EK CAST, the users who can access to the manager and the permissions of them.

Device settings.

When **Device settings** is select in the left menu, the WAN and LAN general information of the EK CAST is shown on the main window. In the **Device settings** menu, the following submenus are available:

- Edit WAN Network Config: it allows to modify the WAN network configuration.
- Edit LAN Network Config: it allows to modify the LAN network configuration.

• Domain and local DNS server: it allows to configure a domain and to use the device as a DNS server.

- **Reboot System**: it allows to reboot the EK CAST device.
- Shutdown System: it allows to shutdown the EK CAST gracefully.

EK EKCast	=	Mem: 38.9%	Cpu: 2%		Network Sent: 3.9 Kbps Recv: 480 bps admin -	English 🔻
MANAGEMENT	Device Settings					
O Edit WAN Network Config	Actions 1	2				-
Edit LAN Network Config Domain and Local DNS Server	Reboot System	Shutdown System				
O Https Configuration O Reboot System	Network Configuration					-
O Shutdown System	WAN Network		LAN Network			
CAST MANAGER	Mode: Manual IP Address: 192.168.10.26		Mode: Manual IP Address: 192.10	58.20.26		
🕰 Main Configuration	Netmask: 255.255.255.0 3 Main DNS Server: 8.8.8.8	Gateway: 192.168.10.254 Secondary DNS Server: 8.8.4.4	Netmask: 255.255 Main DNS Server:	.255.0	Gateway: 192.168.20.254 Secondary DNS Server: 8.8.4.4	
🖨 Devices <	Disable access to EKCast manager from WAN Netw	ork: No				
La Statistics (DHCP Server: Enabled Address Pool Start for DHCP: 192.168.10.40 Gateway: 192.168.10.254 Main DNS Server: 192.168.10.26	Address Pool End for DHCP: 192.168.10.254 Secondary DNS Server: 8.8.4.4	DHCP Server: Ena Address Pool Star Gateway: 192.168 Main DNS Server:	t for DHCP: 192.168.20.50	Address Pool End for DHCP: 192.168.20.; Secondary DNS Server: 8.8.4.4	.50
	Domain Url: ekcast.cc local DNS server: Enabled Use Https Connection: Disabled					
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1. **Reboot System:** this button reboots the EK CAST equipment.

2. **Shutdown System:** this button switches off the EK CAST equipment gracefully. It is strongly recommended to use always this button to shutdown the equipment.

- 3. WAN network: this area shows all the WAN network configuration.
- 4. LAN network: this area shows all the LAN network configuration.

Edit WAN network configuration

This is the same network configuration set with the Network Configuration tool (via the port 9090) which can also be reconfigured through this menu.

Ek EKCast		Mem: 39.7%	Cpu: 1.4%		Network Sent: 4.2 Kbps admin - English - Engli
MANAGEMENT	Device Cattings	Network Configuration	×		
	Device Settings				
O Edit WAN Network Config	Actions	WAN Network			
Edit UAN Network Config		Automatic (DHCP)	O House		
O Domain and Local DNS Server	Reboot System	Automatic (DHCP)	 Manual 		
O Https Configuration					
O Reboot System	Network Configuration	IP Address	Netmask		
O Shutdown System	WAN Network	192.168.10.26	255.255.255.0		
🕮 Users 🔍 🤇	WAN NELWORK	Cateway 2			
CAST MANAGER	Mode: Manual	Main DNS Server	Secondary DNS Server		
	IP Address: 192.168.10.26 Netmask: 255.255.255.0	8.8.8.8	8.8.4.4		Gateway: 192.168.20.254
🕰 Main Configuration	Main DNS Server: 8.8.8.8				Secondary DNS Server: 8.8.4.4
🖨 Devices 🔍	Disable access to EKCast manager from WAN	V DHCP Server			
Im Statistics ∢	Disable access to Excess manager from wor	Address Pool Start for DHCP	Address Pool End for DHCP		
	DHCP Server: Enabled	192.168.10.40	192.168.10.254		
	Address Pool Start for DHCP: 192.168.10.40	Gateway		CP: 192.168.20.50	Address Pool End for DHCP: 192.168.20.250
	Gateway: 192.168.10.254	192.168.10.254			Secondary DNS Server: 8.8.4.4
	Main DNS Server: 192.168.10.26	Main DNS Server	Secondary DNS Server		Secondary DNS Server: 8.8.4.4
		192.168.10.26	8.8.4.4		
	Domain Url: ekcast.cc local DNS server: Enabled			1	
	Use Https Connection: Disabled	Disable access to EKCast manager from WA	N Network		
			•		
		Save	Cancel		
	Copyright © 2021 ITS Partner (0.8.5) S.L. All righ				

- 1. Connection mode.
- Automatic (DHCP): EK CAST will get all the IP configuration from a DHCP server.
- Manual: All the IP configuration must be configured manually.
- 2. Network parameters:
- o IP Address: the IP address of the EK CAST through the WAN port.
- o **Netmask:** the subnet mask of the EK CAST in the WAN port.
- o Gateway: the EK CAST gateway in the WAN port.
- Main DNS Server: the main domain name system server to be used through the WAN port.
- o Secondary DNS Server: the secondary domain name system server through the WAN port.

3. DHCP server: if it is enabled (ticked) the EK CAST will work as a DHCP server and the following parameters can be configured:

• Address Pool Start for DHCP: the first IP address which will be assigned by the DHCP server.

o Address Poll End for DHCP: the last IP address which will be assigned by the DHCP server.

• Gateway: the gateway to be configured in the devices which will receive an IP address by the DHCP server.

• Main DNS Server: the main domain name system server which will be configure in the devices which will receive an IP address by the DHCP server.

• Secondary DNS Server: the secondary domain name system server which will be configure in the devices which will receive an IP address by the DHCP server.

4. Disable access to EKCast manager from WAN Network: if it is ticked, the access to the EK CAST from the WAN interface is blocked. To enable this option is recommended for security reasons.

Edit LAN network configuration

This is the network configuration which will be used in the network where the Chromecast™ devices will be connected.

Ek EKCast		Mem: 39.7%	Cou: 1.6%		Network Sent: 4.2 Kbps admin - English - Engli
MANAGEMENT	Device Settings	Network Configuration	×		
≢ Device Settings 🗸 🗸					
O Edit WAN Network Config	Actions	LAN Network			
O Edit LAN Network Config	Reboot System	Automatic (DHCP)	Manual		
O Domain and Local DNS Server		L			
O Https Configuration	Network Configuration	IP Address	Netmask		
O Reboot System	Network Configuration				
O Shutdown System	WAN Network	192.168.20.26 Gateway	255.255.255.0		
🕮 Users <	MAT HELIIOK	192.168.20.254	2		
CAST MANAGER	Mode: Manual	Main DNS Server	Secondary DNS Server		
CAST MANAGER	IP Address: 192.168.10.26 Netmask: 255.255.255.0	8.8.8.8	8.8.4.4		
🕫 Main Configuration	Main DNS Server: 8.8.8.8	0.0.0.0	0.0.4.4		Gateway: 192.168.20.254 Secondary DNS Server: 8.8.4.4
Devices					
	Disable access to EKCast manager from WAN	V DHCP Server	3		
🛍 Statistics <		Address Pool Start for DHCP	Address Pool End for DHCP		
	DHCP Server: Enabled	192.168.20.50	192.168.20.250		
	Address Pool Start for DHCP: 192.168.10.40	Gateway		CP: 192.168.20.50	Address Pool End for DHCP: 192.168.20.250
	Gateway: 192.168.10.254	192.168.20.254			Secondary DNS Server: 8.8.4.4
	Main DNS Server: 192.168.10.26	Main DNS Server	Secondary DNS Server		accondary bita actively biolitic
		8.8.8	8.8.4.4		
	Domain Url: ekcast.cc				
	local DNS server: Enabled Use Https Connection: Disabled	Save	Cancel		
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- 1. Connection mode.
- Automatic (DHCP): EK CAST will get all the IP configuration from a DHCP server.
- Manual: All the IP configuration must be configured manually.
- 2. Network parameters:
- o IP Address: the IP address of the EK CAST through the LAN port.
- Netmask: the subnet mask of the EK CAST in the LAN port.
- o Gateway: the EK CAST gateway in the LAN port.
- o Main DNS Server: the main domain name system server through the LAN port.
- Secondary DNS Server: the secondary domain name system server through the LAN ort.

3. DHCP server: if it is enabled (ticked) the EK CAST will work as a DHCP server for the Chromecast™ devices network and the following parameters can be configured:

• Address Pool Start for DHCP: the first IP address which will be assigned by the DHCP server.

• Address Poll End for DHCP: the last IP address which will be assigned by the DHCP server.

• **Gateway:** the gateway to be configured in the Chromecast[™] devices which will receive an IP address by the DHCP server.

• Main DNS Server: the main domain name system server which will be configure in the Chromecast™ devices which will receive an IP address by the DHCP server.

• Secondary DNS Server: the secondary domain name system server which will be configure in the Chromecast™ devices which will receive an IP address by the DHCP server.



Domain and local DNS server

Through this menu, it is possible to configure an URL, instead of an IP, to access the EK CAST web frontend and to link the guests' devices to the Chromecast™ devices. This URL will appear on the televisions once the Chromecast™ devices have been added and enabled. If this URL is not configured, the EK CAST IP address will be shown instead.

Ek EKCast		Mem: 39.8%	Сри: 2.2%	Network Sent: 4.2 Kbps Recv: 960 bps admin → English →
MANAGEMENT	Device Settings	Domain and Local DNS Server	×	
	Actions	Use domain name instead of Ip Address		
O Edit LAN Network Config O Domain and Local DNS Server	Reboot System	Enable local DNS Server	2	
O Https Configuration O Reboot System O Shutdown System	Network Configuration	Save	Cancel	
🖶 Users 🗸	WAN Network			
CAST MANAGER	Mode: Manual IP Address: 192.168.10.26		Mode: Manual IP Address: 192.168.20.26	
🏶 Main Configuration	Netmask: 255.255.255.0 Main DNS Server: 8.8.8.8	Gateway: 192.168.10.254 Secondary DNS Server: 8.8.4.4	Netmask: 255.255.255.0 Main DNS Server: 8.8.8.8	Gateway: 192.168.20.254 Secondary DNS Server: 8.8.4.4
Devices	Disable access to EKCast manager from WAM	I Network: No		
	DHCP Server: Enabled Address Pool Start for DHCP: 192.168.10.40 Gateway: 192.168.10.254 Main DNS Server: 192.168.10.26 Domain Urt: ekcast.cc local DNS server: Enabled Use Https Connection: Disabled	Address Pool End for DHCP: 192.168.10.254 Secondary DNS Server: 8.8.4.4	DHCP Server: Enabled Address Pool Start for DHCP: 192.168.20.50 Gateway: 192.168.20.254 Main DNS Server: 8.8.8.8	Address Pool End for DHCP: 192.168.20.250 Secondary DNS Server: 8.8.4.4
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1. Use domain name instead of Ip Address: If it is ticked a domain name will be used instead of the IP address to access to the EK CAST web front-end. When this option is enabled, the following parameters could be configured.

2. **Domain URL:** it is the domain which will be shown on the television to link the guests' devices to the Chromecast™ instead of the EK CAST WAN IP address.

3. Enable local DNS Server: if it is enabled, the EK CAST MIN works as a DNS server.



Https Configuration.

This menu allows to enable or disable the HTTPS protocol to access the EK CAST web front-end. When HTTPS is enabled the connection to the EK CAST will be done in a secure way.

EK EKCast	≡ .	Mem: 39.8%	Cou: 1.3%	Network Sent: 4.2 Kbps admin → English → Recv: 960 bps
MANAGEMENT	Device Settings	Https Configuration	×	
≢ Device Settings ✓	Actions	Https Disabled		
O Edit WAN Network Config	Actions	Signed Certificate		
O Edit LAN Network Config	Reboot System	Private Key File		
O Domain and Local DNS Server			Select File	
O Https Configuration	Network Configuration	Certificate File		
O Reboot System	Network comgutation		Select File	
O Shutdown System	WAN Network			
🕮 Users 🔍 📢		Certificate signed with Letsencrypt 3		
CAST MANAGER	Mode: Manual IP Address: 192.168.10.26	Management Email		
	Netmask: 255.255.255.0		Generate Certificate	Gateway: 192.168.20.254
🗱 Main Configuration	Main DNS Server: 8.8.8.8			Secondary DNS Server: 8.8.4.4
🖨 Devices 🔸	Disable access to EKCast manager from WAN	Save	Cancel	
🛍 Statistics <				
	DHCP Server: Enabled		DHCP Server: Enabled	
	Address Pool Start for DHCP: 192.168.10.40	Address Pool End for DHCP: 192.168.10.254	Address Pool Start for DHCP: 192.168.20.50	Address Pool End for DHCP: 192,168.20.250
	Gateway: 192.168.10.254		Gateway: 192.168.20.254 Main DNS Server: 8.8.8.8	Secondary DNS Server: 8.8.4.4
	Main DNS Server: 192.168.10.26	Secondary DNS Server: 8.8.4.4	Mail DAG SELVET DISIGIO	Secondary Dia Server Bland
	Domain Url: ekcast.cc			
	local DNS server: Enabled			
	Use Https Connection: Disabled			
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1. Https Disabled: if it is selected, HTTPS is disabled, and no additional configuration is required.

2. **Signed certificate:** if it is selected, a private key file and a certificate file must be selected in order to HTTPS works properly.

3. **Certificate signed with Letsencrypt:** if it is selected, a Letsencrypt certificate (<u>https://letsencrypt.org/</u>) will be generated pressing the Generate Certificate button; a management email must be provided in order to generate the Letsencrypt certificate.

When Signed certificate or Certificate signed with Letsencrypt are selected, it is needed to set two NAT entries for port 443 and port 80 in the router which provides Internet connection in order to have remote access to the EK CAST through both ports.



Edit time zone.

Thanks to this option we can reconfigure the time zone of the server.

Ek EKCast	≡	Mem:	17.1 cpu: 0.9%	Network Sent: 46.6 Mbps admin * English *
MANAGEMENT	Device Settings	Edit timezone	×	
≢ Device Settings ✓		Timezone		
O Edit WAN Network Config	Actions	(GMT +01:00) Europe/Madrid	~	-
O Edit LAN Network Config	Reboot System			
O Domain and Local DNS Server		Save	Cancel	
Https Configuration Edit timezone	Network Configuration			-
O Edit timezone O Reboot System	WAN Network		LAN Network	
O Shutdown System				
🖽 Users <	Mode: Manual IP Address: 172.16.5.207		Mode: Manual IP Address: 172.16.200.107	
	Netmask: 255.255.255.0	Gateway: 172.16.5.1	Netmask: 255.255.255.0	Gateway: 172.16.200.1
CAST MANAGER	Main DNS Server: 8.8.8.8	Secondary DNS Server: 1.1.1.1	Main DNS Server: 8.8.8	Secondary DNS Server: 1.1.1.1
🕫 Main Configuration	Disable access to EKCast manager from WAN Network: No			
🖨 Devices 🔍				
Im Statistics <	DHCP Server: Disabled		DHCP Server: Disabled	
	Address Pool Start for DHCP: Gateway:	Address Pool End for DHCP:	Address Pool Start for DHCP: Gateway:	Address Pool End for DHCP:
	Main DNS Server:	Secondary DNS Server:	Main DNS Server:	Secondary DNS Server:
	Domain URL: Disabled			
	local DNS server: Disabled Use HTTPS Connection: Disabled			
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Reboot system.

It restarts the EK CAST device.

Ek	EK Cast		Mem: 39.7%	pu: 1.8%	Network Sent: 4.2 Kbps admin ▼ English ▼ Recv: 960 bps admin ▼ English ▼
MANAGEMENT		Device Settings			
≢ Device S		Actions			
O Edit WA	AN Network Config	Actions			
	N Network Config	Reboot System	Shutdown System		
	n and Local DNS Server				
O Https Co	Configuration	Network Configuration			-
O Reboot					
Users	«	WAN Network		LAN Network	
Users	,	Mode: Manual		Mode: Manual	
CAST MANAGE	ER	IP Address: 192.168.10.26		IP Address: 192.168.20.26	
🏟 Main Co		Netmask: 255.255.255.0 Main DNS Server: 8.8.8.8	Gateway: 192.168.10.254	Netmask: 255.255.255.0 Server: 8.8.8.8	Gateway: 192.168.20.254 Secondary DNS Server: 8.8.4.4
🖨 Devices					
		Disable access to EKCast manager from WAN Networ	k: No The system will reboot. Are you sure?		
🖿 Statistic			ок	Cancel ver: Enabled	
		DHCP Server: Enabled Address Pool Start for DHCP: 192.168.10.40	Address Pool End for DHCP: 192.168.10.254	Address Pool Start for DHCP: 192.168.20.50	Address Pool End for DHCP: 192.168.20.250
		Gateway: 192.168.10.254	Address Poor Ling for Differ, 152,106,10,254	Gateway: 192.168.20.254	
		Main DNS Server: 192.168.10.26	Secondary DNS Server: 8.8.4.4	Main DNS Server: 8.8.8.8	Secondary DNS Server: 8.8.4.4
		Domain Url: ekcast.cc local DNS server: Enabled			
		Use Https Connection: Disabled			
		Copyright © 2021 ITS Partner (O.B.S) S.L. All rights reserv	ed.		



Shutdown system.

It shutdowns the device in gracefully way. This is the right way to switch off the device.

Ek EKCast		Mem: 39.1%	Cpu: 1.2%	Network Sent: 4.2 Kbps Recv: 960 bps admin ▼ English ▼
MANAGEMENT	Device Settings			
	Actions			
O Edit WAN Network Config	Actions			
O Edit LAN Network Config	Reboot System	Shutdown System		
O Domain and Local DNS Server O Https Configuration				
O Reboot System	Network Configuration			-
O Shutdown System				
🚢 Users 🔍 🔇	WAN Network		LAN Network	
CAST MANAGER	Mode: Manual		Mode: Manual	
	IP Address: 192.168.10.26 Netmask: 255.255.255.0	Gatr	IP Address: 192.168.20.26	Gateway: 192.168.20.254
🗱 Main Configuration	Main DNS Server: 8.8.8.8	Sec () 192.168.10.26	Server: 8.8.8.8	Secondary DNS Server: 8.8.4.4
🖨 Devices <	Disable access to EKCast manager from WAN Netwo	The system will shutdown. Are you sure?		
🖿 Statistics 🗸		ок	Cancel	
	DHCP Server: Enabled		ver: Enabled	
	Address Pool Start for DHCP: 192.168.10.40	Address Poor End for DICPA 152(100(10/254	ool Start for DHCP: 192.168.20.50 Gateway: 192.168.20.254	Address Pool End for DHCP: 192.168.20.250
	Gateway: 192.168.10.254 Main DNS Server: 192.168.10.26	Secondary DNS Server: 8.8.4.4	Main DNS Server: 8.8.8.8	Secondary DNS Server: 8.8.4.4
	Domain Url: ekcast.cc			
	local DNS server: Enabled Use Https Connection: Disabled			
	ose https connection. Disabled			
	Copyright © 2021 ITS Partner (O.B.S) S.L. All rights rese	rved.		
javascript:settingsShutdownSystem()				





Users

This menu allows to manage the users which can access to the EK CAST manager. From this menu it is possible to create and delete them. Single and multiple selection are possible.

Ek EKCast	=	Mem: 39.2%	Cpu: 1.5%	Network Sent: 6.6 Kb Recv: 2.5 Kb	ps admin ▼ English ▼ ps
MANAGEMENT	Users				
E Device Settings ✓	Users				
🚢 Users 🗸 🗸	■ Id Username Creation	Date Last Login			
O Create User O Delete User	1 admin 2016-02-04		Admin, Manager, Devices manager, Devices controller,	Viewer, Stats	2 🗹
CAST MANAGER			0		
😂 Main Configuration					
🗠 Statistics 🗸					

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1. Created users' information: in this area, the user creation date, the last login and the assigned permissions are shown.

Edit button: it allows to edit user's permissions (roles). When this button is pressed, the following window is shown where it is possible to add permissions to the user (moving permissions from the left side to the right side using '>>' and '>' buttons) or to delete permissions to the user (moving permission from the right side to the left side using '<' and '<' buttons).

			×
User			
admin			
Roles			
Admin Config Manager Service Editor Service Manager Viewer	▲ > <	Admin Config Manager Service Editor Service Manager Viewer	•
Save		Cancel	



Create user.

It allows to create a user which could access to the EK CAST manager. It is possible to assign permissions to the new user moving them from the left side to right side pressing the '>>' and '>' buttons.

Ek EKCast		Mem: 40% Cou: 0.6%	Network Sent: 3.9 Kbps Recv: 480 bps admin • English •
MANAGEMENT	Users	User ×	
≢ Device Settings <		User	
📽 Users 🗸 🗸	Users		
O Create User	Id Username	Password	
O Delete User	🔲 1 admin	Confirm Password	ager, Devices controller, Viewer, Stats
CAST MANAGER		+0	
📽 Main Configuration			
🖨 Devices 🔸		Admin ^ >>	
🖿 Statistics 📢		Manager > Devices manager	
		Devices controller <	
		Stats V	
		Create User Cancel	
		Create vaci Caricer	
	Copyright © 2021 ITS Partner (O.B.S) S.L. All righ	ts reserved.	

Once configured all the user parameters the "Create User" button should be pressed to create the new user.



Delete user.

It allows to delete the users which are selected in the main panel.

EK EKCast	≡ Mem:	39.2% Cpu	: 1.5% Network	Sent: 6.6 Kbps Recv: 2.5 Kbps	English 🔻
MANAGEMENT	Users				
	Users				
🛎 Users 🗸 🗸	Id Username Creation Date	Last Login			_
O Create User	1 admin 2016-02-04 19:05:14	2021-08-20 09:46:43	Admin, Manager, Devices manager, Devices controller, Viewer, Stats		ľ
CAST MANAGER					
😂 Main Configuration					
🖨 Devices <					
🖿 Statistics 🖌					
https://192.168.10.26/manager/index.php	Copyright © 2021 ITS Partner (O.B.S) S.L. All rights reserved.				

Cast Manager.

The following menus allow to manage and to configure the Chromecast™ devices.

Main Configuration.

From this panel, it is possible to configure the appearance of the Chromecast[™] application on the televisions, for example, the widgets and banners, the tokens to be used to link the guest's devices and the Chromecast[™] device.

Ek EKCast	E	Mem: 40.3% Cpu: 16%	Network Sent: 3.8 Kbps admin + English +
MANAGEMENT	Main Configuration		
≅ Device Settings <	Enable captcha at login	Look and Feel	Widgets 5
CAST MANAGER	1 Site name	Default Language	О Коле
Configuration	Diselans	Espanoi Colour	Image Slideshow C
🖨 Devices <	Use external URL for cast devices	#1b3666	
🖦 Statistics <	External URL	Text Colour	Weather information Copyright
	Max. simultaneous paired users 4	amiti	-strong>Copyright © 2021 HTS Partner (0.8.5) S.1. All rights reserved.
	Time 120000 ©	Show Logs Background Colour Background Image	PMS 6 Cable PMS connection PMS user
	Ticket Type • Numeric 2 Alphanumeric Ticket tength 2 Alphanumeric		res uner
	6 Terms and Privacy Bit Brivacy Edit Terms Edit Privacy	Change Logo Change Icon Change Itg Image	Sive
	Copyright © 2023 ITS Purtaer ((0.8.5) S.L. All rights reserved.		

1. Main configuration.

• Enable captcha at login: If it is enabled, a captcha (a type of challenge–response test to increase the login security) is shown to login the EK CAST manager.

• Site name: name of the system in the network which will be shown on the television.

• Use external URL for cast devices: An external url can be assigned to perform the cast.

o Max. Simultaneous paired users: Maximum number of customers which can be paired linked simultaneously to each Chromecast™ device.

• Enabled automatic daily unpair: if it is enabled, all the guests' devices will be unlinked from the Chromecast™ devices daily at the configure time.

• **Time:** it is the time when the Chromecast devices will be unlinked form the guests' devices daily if "Enabled automatic daily unpair" option is enabled.

2. Ticket type:

• **Numeric:** if it is selected, the ticket (token) shown on the television for the pairing process with the Chromecast™ device will be numeric.

• Alphanumeric: if it is selected, the ticket (token) shown on the television for the pairing process with the Chromecast™ device will be alphanumeric.

3. Terms and Privacy:

• Edit terms: this button allows to edit the terms of use of the EK CAST service which will be shown to the guests.

• Edit privacy: this button allows to edit the privacy policy of the EK CAST service which will be shown to the guests.

4. Look And Feel:

• **Default language:** it allows to select the default language of the EK CAST application.



- Main color: it sets the main colour used in the front-end of the EK CAST application.
- Text color: it sets the text colour used in the front-end of the EK CAST application.

• Show name: if it is ticked, the configured site name is shown on the EK CAST application.

• **Show Logo:** if it is ticked, the configured logo is shown on the EK CAST application.

• **Background color**: if it is ticked, the configure colour will be used in the background of the EK CAST application shown on the television.

• **Background image**: if it is ticked, the configure background image will be used in the background of the EK CAST application shown on the television.

- 5. Widgets / Copyright:
- o None: No se muestra ninguna extensión.

• **Image slider:** if it is ticked, a carrousel of images will appear on the EK CAST application shown on the television. To configure the pictures, the edit button should be pressed to show the following window:



- 1. Added pictures.
- 2. Buttons to add (+) or delete (-) pictures.
- 3. Edit button to modify the current pictures configured.
- 4. Ok button to apply the configuration.

• **Videos Playout:** We can enable a series of images to be displayed continuously on the Chromecast[™] screen:

et volume	1
VIDEO_Anga_2023_Baja.mp4 sample_960x400_ocean_with_audio.mp4	+ 2 2 3

- 5. Added pictures.
- 6. Buttons to add (+) or delete (-) pictures.
- 7. Edit button to modify the current pictures configured.
- 8. Ok button to apply the configuration.

• Weather Information: if it is ticked, a widget with the weather information will be shown on the EK CAST application shown on the television. If this option is enabled, it is needed to press the edit button to configure the required parameters of this widget.

Weather information	×
Weather information is provided by open https://openweathermap.org/price to run	weathermap.org. You can obtain a free API key in this service.
API key	
City	
Zaragoza, ES	ß
Accept	Cancel

It is needed to follow the steps explained in https://openweathermap.org/price_to_get a free API key. This website has nothing to do with EK.

• **Copyright:** Form to edit the copyright text shown on the EK CAST application shown on the television.

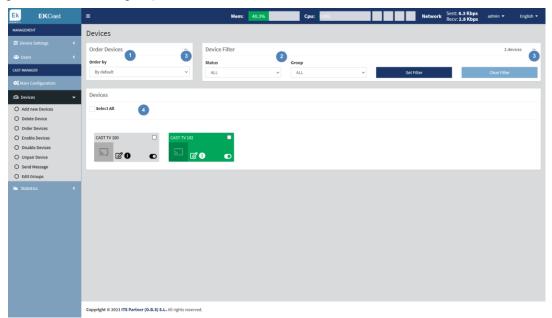
6. **PMS**: We can integrate a PMS if necessary.

Once configured all the parameters of the **Main Configuration** panel, the **"Save**" button should be pressed to save the new configuration.



Devices.

This menu allows to view all the Chromecast[™] devices which are enabled in the EK CAST system. From this menu, it is also possible to manage all the Chromecast[™] devices, to add or to delete them, to send messages to them and to group them.



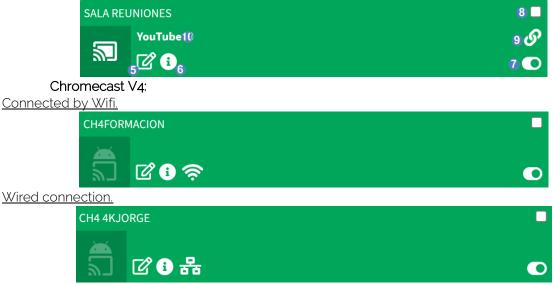
1. Order Devices criteria combo box: it allows to select the sort criteria for the Chromecast™ devices shown in the device list.

2. Device Filter combo boxes: it allows to select the filter to be applied to the list of Chromecast™ device below. The Status filter allows to select the ALL/Enabled/Disabled/Unregistered values. The Group filter allows to select all or any of the groups created using the menu option "Edit groups".

3. Buttons to hide (-) or to show (+); they allow to show or to hide the "Order Devices" and the "Device Filter" panels.

4. Devices list: it show all the available Chromecast™ devices and their status.

Chromecast V3:



K EKSELANS BY ITS

5. Edit button: it allows to edit different parameters of the Chromecast™ device.

Save	Cancel	
14c14e5ee4f6		~
Mac Address	Country	
		~
PMS Id	Group	
Sala de formación		
Description		
• Chromecast	Television	
Mode		
Devices		×

o Mode:

o Chromecast: It is the normal mode if we install an external Chromecast™.

o TV: This mode is for TVs that have Chromecast™ built in. QR will only be displayed when the TV enters Chromecast™ mode.

o Description: the description of the Chromecast[™] device.

o PMS identifier: Identifier needed to link if we use a PMS system.

o MAC address: the MAC address of the Chromecast™ device.

o Group: this combo box allows to select the group, previously created, where this Chromecast ™ device will be included.

o Country: this combo box allows to select the country of the guests using this Chromecast™ device. This will modify the behaviour of EK CAST service in order to take into account the country of the guests.

6. **Information button:** it shows information about the device:

Información	
Id: 6	
Descripción: Sala Reuniones	
Grupo:	
Dirección Mac: 14c14e5ee4f6	
País: -	
Lenguaje: ES	

7. Enable/disable button: it allows to enable or disable this Chromecast™ device. These two types of status are shown as follows:

a. Enabled: the device is shown in green colour. This means that the device is added to the system, it is detected, and it can manage casting requests.

b. Disabled: the device is shown in red colour. This means that the device is added to the system, it is detected but it cannot manage casting requests.

c. Enabled, but no internet outlet: In orange. This tells us that the Chromecast[™] is seen on the network, but has no stable internet outlet, so it does not work properly.

8. Tick to mark: this tick allows to select this Chromecast[™] device to apply any action only on it, for example, to delete it.

9. Linked devices: if there are guest's devices linked to this Chromecast[™] device, this symbol will appear. When the mouse pointer is placed over this symbol, the number of guest's devices linked to this Chromecast[™] device will be shown.

10. Service loaded in the Chromecast[™] device: this provides information about the application which the guest is using in the Chromecast[™] device in real time.



Add new devices.

This menu option allows to add new Chromecast™ devices to the EK CAST system.

Ek EKCast		Mem: 40.2%	Cnu: 2.4%		Network	Sent: 10.4 Kbps Recv: 7.5 Kbps		
MANAGEMENT	Devices	Devices		×				
	Order Devices	Automatic device search	Add device manually				2 devi	
🚢 Users 🛛 <	Order by	Sca	n devices					
CAST MANAGER	By default				et Filter			
🛱 Main Configuration		Add	Cancel					
🖨 Devices 🗸 🗸	Devices							
O Add new Devices	Select All							
O Delete Device O Order Devices								
O Enable Devices	CAST TV 100 CAST	TV 102						
O Disable Devices								
O Unpair Device O Send Message								
O Edit Groups								
🛍 Statistics <								
	Copyright © 2021 ITS Partner (0.B.S) S.L. All righ	ts reserved.						

1. Adding mode type:

a. Automatic device search: if this option is selected, as soon as the Scan devices button is pressed an automatic search of Chromecast[™] device is done through the LAN port of the EK CAST. After this search, it is possible to select the Chromecast[™] devices to be added to the system.

b. Add device manually: if this option is selected, one or several Chromecast[™] devices can be added manually, selecting the number of devices to be added and setting a common name for all the devices. After pressing the Add button, the new Chromecast[™] devices will be added to the system with the same name so it is needed to edit each Chromecast[™] device to set the MAC address of each device and to set a different name for each one.

2. Scan devices button: Once the Automatic device search option is selected, the Scan device button should be pressed to start the device search.

Once selected the Chromecast™ devices to be added, the Add button must be pressed.





Delete devices.

This menu option allows to delete Chromecast™ devices from the EK CAST system.

EK EKCast	Ξ	Mem: 40.3%	Cpu: 0.8%	Network Sent: 6.3 Kbps Recv: 2.8 Kbps	admin 🔻 English 🔻
MANAGEMENT	Devices				
	Order Devices –	Device Filter			2 devices -
🐣 Users <	Order by	Status	Group		
CAST MANAGER	By default 🗸	ALL ~	ALL ~	Set Filter	Clear Filter
🚓 Main Configuration	Devices				
🖨 Devices 👻	Select All				
Add new Devices Delete Device					
O Order Devices	CAST TV 100 CAST TV 102				
C Enable Devices Disable Devices					
O Unpair Device	🔊 C 🕄 🖸 🥯	0 C			
Send Message Edit Groups					
🗠 Statistics <					
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Order devices.

This menu option allows to sort the Chromecast™ devices in the EK CAST system, in a custom way.

Ek EKCast		Mem: 41.4%	Cou: 17.4%	Network Sent: 13.5 Kbps Recv: 10.0 Kbps	
MANAGEMENT	Devices	Order Devices	×		
≢ Device Settings <		Cast tv 100	^		2 devices —
😂 Users 🔍 <	Order by	Cast tv 102			2 devices
CAST MANAGER	By default	2	v 🕚	Set Filter	Clear Filter
📽 Main Configuration			*		
🖨 Devices 🗸 🗸	Devices				
O Add new Devices	Select All				
O Delete Device			~		
O Order Devices O Enable Devices	CAST TV 100 🗸 CAST	Save	Cancel		
O Disable Devices					
O Unpair Device		CO O			
 Send Message Edit Groups 					
Statistics					
	Complete © 2021 ITC Darting (0.0.0) a state	the second of th			
	Copyright © 2021 ITS Partner (O.B.S) S.L. All right				

1. Arrow buttons to sort: these buttons allow to modify the position of the selected Chromecast™ device.

2. **Device list:** this is the list of Chromecast[™] devices available and their current positions in the EK CAST system. If a position modification of a Chromecast[™] device is required, the devices should be selected in this list before using the arrow buttons.

Once sorted the Chromecast[™] devices, the Save button should be pressed.



Enable devices.

This menu option allows to enable Chromecast™ devices for casting. As soon the Chromecast™ devices are enabled, they get the green colour in the devices list.

EK EKCast	=	Mem: 41%	Cpu: 2.5%		letwork Sent: 4.2 Kbps Recv: 7.8 Kbps	admin 🔻 English 🔻
MANAGEMENT	Devices					
	Order Devices –	Device Filter				2 devices -
🚢 Users 🔸	Order by	Status	Group			
CAST MANAGER	By default 🗸	ALL V		✓ Set Filter		Clear Filter
😂 Main Configuration						
🖨 Devices 🗸 🗸	Devices					
O Add new Devices	Select All					
O Delete Device Order Devices						
O Enable Devices	CAST TV 100 CAST TV 102					
O Disable Devices						
O Unpair Device O Send Message)				
O Edit Groups						
🖿 Statistics <						
	Copyright © 2021 ITS Partner (O.B.S) S.L. All rights reserved	L				

Disable devices.

This menu option allows to disable Chromecast™ devices for casting. As soon the Chromecast™ devices are disabled, they get the red colour in the devices list.

Ek	EK Cast	Ξ	Mem: 41.1%	Cpu: 5%		Network Sen	nt: 61.3 Kbps cv: 81.9 Kbps admin	▼ English ▼
MANAGEME		Devices						
≢ Device		Order Devices -	Device Filter					2 devices -
🐣 Users	<	Order by	Status	Group				
CAST MANA	GER	By default 🗸 🗸	ALL	✓ ALL	~	Set Filter	Clear F	ilter
🗱 Main C	Configuration							
🖨 Devio	es 🗸	Devices						
	new Devices	Select All						
O Delet								
O Enab	le Devices ble Devices ir Device	C45T TV 100	• 8 ©					
O Edit (Groups							
🖿 Statis								
		Copyright © 2021 ITS Partner (O.B.S) S.L. All rights reserved	I.					

Reboot Devices.

Allows to reboot selected devices.

				1/2.16.5.206 dice			
Ek	EK Cast			You are going to reboot 1 device. Are you sure?	Сри	a 235 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2	Network Sent: 20.3 Kbps Recv: 41.7 Kbps admin - English -
MANAGEME	INT	Devices		Aceptar	Cancelar		
≣ Devic		Order Devices	- Device Filter				2 devices —
🖶 Users		Order by	Status	Group			* 201715-013
CAST MAN	GER	By default	~ ALL	~ ALL		Set Filter	Clear Filter
C Main							
🖨 Devic	xes 👻	Devices					
	new Devices	Select All					
-	te Devices						
O Orde	r Devices Ile Devices	LAB	SALA DE FORMACIÓN				
	ne Devices ble Devices						
	tot Devices	☐ 2 0	o 🔊 🖉 i				
	air Devices						
O Send	I Message						
O Edit	Groups						
in Statis							



Unpair device.

This menu option allows to unlink the guest's devices currently linked to a Chromecast™ device.

EK EKCast	≡	Mem: 40.8%	Cpu: 2.3%	Network Sent: 21.6 Kbps Recv: 18.1 Kbps	admin 🔻 English 🔻
MANAGEMENT	Devices				
幸 Device Settings く	Order Devices –	Device Filter			2 devices —
🚢 Users 🔸	Order by	Status	Group		
CAST MANAGER	By default 🗸 🗸	ALL ~	ALL	Set Filter	Clear Filter
🗱 Main Configuration					
🖨 Devices 🗸 🗸	Devices				
O Add new Devices	Select All				
O Delete Device O Order Devices					
Order Devices Enable Devices	CAST TV 100 CAST TV 102	192.168.10.26			
O Disable Devices			to this device. The users will		
O Unpair Device	^m 20 0 ^m 20	This action will unpair any user connected have to repeat the pairing procedure in or the cast device. Are you sure?	der to gain access again to		
Send Message Edit Groups					
La Statistics			OK Cancel		
	Conversion to 2021 ITE Produce (O. P. C) C. L. M. Schlar				
	Copyright © 2021 ITS Partner (O.B.S) S.L. All rights reserved				
javascript:deviceUnpairDevices();					

Send message.

This menu option allows to send a message to one or several Chromecast[™] devices to be shown on the televisions.

Ek EKCast		Mem: 40.8%	Cou: 17.3	Network Sent	: 34.2 Kbps : 32.0 Kbps admin 🔻 English 🔻
MANAGEMENT	Devices	Send Message	×		
幸 Device Settings く		Message			
🐸 Users 🛛 🔸	Order by	•			2 devices —
CAST MANAGER	By default	Message type		Set Filter	Clear Filter
🛱 Main Configuration		Normal			
🖨 Devices 🗸 🗸	Devices	Forced 2 Alarm			
O Add new Devices	Select All				
O Delete Device Order Devices		Ok	Cancel		
O Enable Devices	CAST TV 100 CAST	TV 102			
O Disable Devices	a <mark>66 o</mark> a	C O			
O Unpair Device O Send Message					
O Edit Groups					
🖮 Statistics <					
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1. Message: Message to be sent to the selected Chromecast™ devices.

2. Message type: there are three types of messages which can be sent to the Chromecast™ devices:

a. **Normal:** This message doesn't interrupt the casting. If the Chromecast[™] device is not casting, the message will be shown on the television immediately; if the Chromecast [™] device is casting, the message will be shown on the television when the casting finishes.

b. **Forced:** This message interrupts the casting and it is always shown immediately on the television.

c. **Alarm:** This message interrupts the casting, it is always shown immediately on the television, and it is shown in red, blinking, simulating an emergency alarm.

The message will be sent as soon as the OK button is pressed.



Edit groups.

This menu option allows to create groups to include the Chromecast™ devices inside.

uncasciniti uncasciniti <	Ek EKCast		Mem: 40.9%	Cou: 1.8%	Network Sent: 12.9 Kbps Recv: 11.2 Kbps	
<pre>Leves setergs < c Leves s</pre>	MANAGEMENT	Devices	Edit Groups	×		
Cott Nukoči Pje deduži Pje deduži Pje deduži Pieka Nationa Devicas O bakte Devicas	幸 Device Settings く		VIP	^ +		
CAST NUMACRI Of Kain Configuration O berices O Add new Devices O trites O trite	🕮 Users 🔍 📢		Economy Staff			2 devices —
Octob Addrew Devices O befete Devices O forder Devices D blabbe Devices O blabbe Devices Send Message Send Message	CAST MANAGER			2	Set Filter	Clear Filter
 Add rew kore Deleta Devices Drahe Devices Delata Devices Delata Devices Send Masage Cost TV 100 Cost TV 1	🕸 Main Configuration					
 Add new Devices Delete Devices Enable Devices Diable Devices Send Message C Stift V 100 S Statsus 	🖨 Devices 🗸 🗸	Devices				
Order Devices Exable Devices O Lingal Devices Send Message Calk Groups	O Add new Devices	Select All		v		
 Ensible Devices Uspair Devices Send Message Edit Groups Statistick 			Ok			
 Disable Devices Send Message Edit Groups A Statistics 		CAST TV 100 🗸 CAST	TV 102			
Send Message C Edd Corouph A Send Strice						
Copyright © 2021 ITS Partner (0.8.5) S.L. All rights reserved.						
Copyright © 2021 ITS Partner (0.0.5) \$1. All rights reserved.						
Copyright © 2021 ITS Partner (0.8.5) \$1. All rights reserved.						
Copyright © 2021 ITS Partner (0.8.5) S.L. All rights reserved.						
Copyright © 2021 ITS Partner (0.8.5) S.L. All rights reserved.						
Copyright © 2021 ITS Partner (0.8.5) 5.1. All rights reserved.						
Copyright © 2021 ITS Partner (0.8.5) S.L. All rights reserved.						
Copyright © 2021 ITS Partner (0.8.5) S.L. All rights reserved.						
		Copyright © 2021 ITS Partner (O.B.S) S.L. All rig	hts reserved.			

- 1. Add/Delete buttons: they allow to add (+) or to delete (-) groups.
- 2. Edit button: it allows to edit a created group.
- 3. Groups list: it shows the list of groups currently available.

For example, when the '+' button is pressed the following pop-up window is shown:

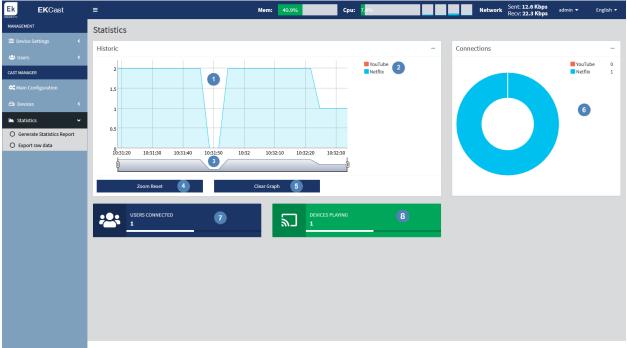
Edit Groups	×
Name	
Save	Cancel

1. Name: Name of the group to be created.



Statistics.

In the statics menu, it is possible to check in real time the number of connections to the Chromecast™ devices and to analyse the current applications loaded in the Chromecast™ devices.



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1. **Historic**: it is a graph in real time which provides information about the number of Chromecast[™] which are casting and the kind of services which are loaded in these devices.

2. Colour used in the historic graph for each service.

3. **Zoom:** it is possible to adjust the time scale of the historic graph.

4. **Zoom Reset button:** it allows to reset the zoom done to the time scale of the historic graph.

5. **Clear Graph:** it deletes the current graph.

6. **Connections:** it is a connection graph which allows to see quickly the number of current connections to the Chromecast[™] devices and the most popular services loaded in these devices.

7. Users connected: it is the number of users connected to the Chromecast™ devices in real time.

8. Devices playing: it is the number of Chromecast[™] devices casting contents in real time.



Generate statistics report.

This menu allows to generate a statistics report in PDF format between two dates.

Ek EKCast		Mem: 40.2% Cour 2.4%		Network	Sent: 10.4 Kbps Recv: 7.1 Kbps		
MANAGEMENT	Statistics	Generate Statistics Report	<				
		2021-08-18 10:33:00 - 2021-08-20 10:33:00					
👪 Users 🔸						YouTube	0
CAST MANAGER	2	Generate				Netflix	1
🛱 Main Configuration	1.5						
🖨 Devices 🔹 🕻	1						
🕍 Statistics 🗸 🗸	0.5						
O Generate Statistics Report O Export raw data							
C Export raw data	0 10:31:30 10:	2 10:32:30 10:33					
		f					
	Zoom Reset	Clear Graph					
	USERS CONNECTED 1						
			_				
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The report is automatically downloaded locally as soon as the Generate button is pressed.

Export raw data.

This menu allows to export directly the raw data stored in the EK CAST both in CSV format and Excel XLS format.

Ek EKCast	=	Mem: 40.2% Cour 1.7%	Network Sent: 4.2 Kbps Recv: 960 bps	admin 👻 English 👻
MANAGEMENT	Statistics	Export raw data ×		
				_
🔹 Users 🔍 🤇		CSV File DExcel XLS File		YouTube 0
CAST MANAGER	2			Netflix 1
🕸 Main Configuration	1.5	Generate File Cancel		
🖨 Devices <	1			
 Statistics Generate Statistics Report 	0.5			
O Export raw data	0 10:31:30 10:32	10:32:30 10:33 10:33:30		/
	10.52	103230 1033 1030		
	Zoom Reset	Clear Graph		
	USERS CONNECTED			
	Copyright © 2021 ITS Partner (O.B.S) S.L. All rig	nts reserved.		

The file is downloaded locally in the selected format as soon as the Generate File button is pressed.



FAQ.

- We don't have access to the equipment: We connect directly to the WAN port. Then we verify that we are within the IP range of the equipment, as standard it comes with 172.16.5.209 mask 255.255.255.0. We try to ping that IP if it responds we must be able to access it through the IP 172.16.5.209:9090.
- The most common errors that the Chromecast will show us on the screen are:
 - o <u>Chromecast V3:</u>
 - The "Code o Out of Service" screen appears: It is necessary to do a scan using the <u>Add new devices.</u>In case of scanning and not appearing, the installation should be checked to detect possible connectivity problems.
 - "Out of Service Code 1" appears on the TV screen: The Chromecast is added but not enabled.
 - Google screen appears: Your Chromecast can't establish a network connection.
 - o <u>Chromecast V4:</u>
 - It appears on the television screen 'Out of Service Code 0. A scan is required using the <u>Add new devices</u>. In case of scanning and not appearing, the installation should be checked to detect possible connectivity problems.
 - "Out of Service Code 1" **appears on the TV screen**: The Chromecast is added but not enabled.
 - "Code 200" **appears on the TV screen**: Your Chromecast can't establish a network connection to the internet.
- We cannot cast if the Chromecast[™] is in orange status: We must verify the connection of the Chromecast[™] with which we want to cast, since it does not have a connection with a stable internet output.