



PENGUMUMAN

Nomor : 112/PUM/00/PST/2018

Undangan Pelaksanaan PoC MCU Vicon

Sehubungan dengan kebutuhan PT Indonesia Comnet Plus terhadap perangkat Server Core MCU untuk layanan Vicon, bersama ini kami mengundang untuk dapat berpartisipasi dalam pelaksanaan Proof of Concept (PoC) dengan prasyarat PoC dilaksanakan langsung oleh principle atau distributor/partner resmi yang ditunjuk.

Company profile, datasheet lengkap dan Scaling Capacity perangkat yang akan diajukan dalam PoC dikirimkan paling lambat 8 Oktober 2018 melalui email ke askmultimedia@iconpln.co.id dengan subject email POC MCU Vicon <nama Perusahaan>.

Test Plan Skenario akan diberikan kepada principal yang lolos prasyarat diatas.

Segala bentuk biaya yang akan timbul dalam pelaksanaan Proof of Concept (PoC) ini menjadi tanggungan principal. Terhadap principal yang telah mengikuti pelaksanaan PoC dan memenuhi persyaratan sesuai dengan pengujian diberikan surat keterangan hasil PoC.

Pertanyaan terkait dengan pelaksanaan Proof of Concept (PoC) ini dapat disampaikan melalui email : askmultimedia@iconpln.co.id atau telepon no. (021) 5253019 ext 8809 & 8778.

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VP SSU OpTIK Publik

Wahyu Haris Kusuma Atmaja

Lampiran

1. MCU

Category	Specification Requirement
Overall requirements	Uses a carrier-class and plug-in structure design, provides at least 10 main control board and service board slots, and supports board expansion for smooth system capacity expansion.
	Supports ITU-T H.323, IETF SIP, protocols, supports concurrent access of H.323, SIP endpoints, and provides good compatibility.
	Supports call bandwidth of 64 kbit/s to 6Mbit/s, and supports active video of the 1080p, 720p, 4CIF, and CIF resolutions.
	Supports flexible port resource splitting: One 1080p60 port can be split into two 1080p30 ports, four 720p30 ports
	Supports at least 25 1080p60 sites/50 1080p30 sites/100 720p30 sites concurrent access
	Can be integrated with Existing MCU (interoperability), can be expanded with several MCU core servers.
	Supports more than 50 720p30 concurrent meeting room
Video	Supports ITU-T H.264, H.264 HP, H.263 video protocols.
Audio	Supports G.711, G.722, G.722.1, G.722.1C, G.729, ACC-LD, Opus and audio protocols
	Supports the ability to add the presentation to the continuous presence for displaying the presentation in a pane in the multi-pane layout, and allows an endpoint that does not support dual streams to receive shared content.
	Supports presentation adaptation that does not occupy port resources for the video.

Reliability	Supports a resource pool consisting of multiple MCUs, manages MCU resources in a unified manner, and dynamically allocates MCU resources based on the resource usage to implement load balancing for MCU resources.
	Supports 24 x 7 continuous running.
	Supports SIP (TLS/SRTP) signaling and media stream encryption, AES encryption algorithm, H.235 media stream encryption, and H.235 authentication and signaling integrity verification.
Conference functions	Supports audio and video IVRs to help endpoint users conveniently create conferences or join ongoing conferences.
	Supports caption overlay so that both SIP and H.323 sites can receive full-screen captions and banners when SIP and H.323 sites join the same conference.
Network security	Prompts users to change the password upon the first login, and provides violent cracking prevention mechanisms such as the risk notification for a weak password, connection timeout, and limited number of password attempts.
	Supports HTTPS, SSHv2, SNMPv3, and FTPS transmission modes for external management ports (web, SSH, serial, SNMP, and FTP ports).
	Stops device management protocols based on IPv4 and IPv6 and displays alarms when ARP, IP, ICMP, TCP, UDP, DHCP, or RTP/RTCP attacks are detected, and automatically restores the device to the state before the attacks when they end.

2. Management Control System

Category	Specification Requirement
General Requirements	Uses the B/S architecture and an independent hardware server (not the built-in module of the MCU), and provides functions such as conference management, device management, and conference control.
	Supports cluster backup of the conference management platform. When the active server fails, services are automatically switched to the backup server without manual intervention.
	Supports H.235, TLS, and SRTP security encryption protocols; supports IPv4 and IPv6 protocol stacks.
Call Control	Supports H.323 Gatekeeper, SIP Server, and SIP Proxy functions.

	<p>Supports deployment of the SIP/H.323 registrar server in two-node cluster hot standby mode to ensure seamless service switching.</p>
	<p>Supports at least 200 managed and unmanaged devices and can expansion to 3000, 200 registrations and can expansion to 1000</p>
	<p>Supports call control, bandwidth management, blacklist and whitelist, registration status display, routing management, domain-based management, number change, and URL calling.</p>
	<p>Supports traversal proxy capability.</p>
	<p>Supports native rate and matching resolution per endpoint, up to 4K UHD</p>
	<p>Can maintain ongoing conferences even during periods of high packet loss (up to 20 percent)</p>
	<p>Provides HD quality with lower bandwidth connections (as low as 512 kbps)</p>
	<p>Has invisible latency capability, which is less than 20 ms</p>
	<p>Supports H.323/SIP traversal protocols in compliance with standards such as H.460, ICE, STUN, and TURN.</p>
Conference Control	<p>Provides the network address book server for implementing functions such as querying, downloading, and automatically updating items in the address book; Supports LDAP access authentication and encryption.</p>
	<p>Supports operations such as recording, live broadcasting, and setting the video source for recording on the conference management GUI.</p>
	<p>Displays the local microphone status of each endpoint on the conference management platform.</p>
	<p>Supports conference merge and split.</p>
	<p>Supports centralized administration for voice control (mute / unmute), can call and break participant relationships, can set the layout of participants manually.</p>
	<p>Can share two-way presentations, and can change the content of the presentation between participants.</p>
	<p>Provides a conference template that presets parameters such as continuous presence, caption, banner, broadcasting, and broadcasting in turn for the chair participant.</p>

management	Supports dashboard display on the home page of the management web UI, allowing maintenance personnel to conveniently check the system running status, including the device monitoring information, system monitoring information, resource usages (CPU usage and memory usage) of the system running the platform.
	Provides level- and rights-based management of devices and conferences according to the organizational structure.
	Supports and provides network topology management. The network topology can be organized according to the physical locations of involved devices, and multi-layer display can be supported. The network topology can also be zoomed in or out. The administrator can monitor the device busy/idle status and alarms on the network topology in real time, and parameter setting can be supported.
	Provides CDRs for the billing system. The following functions can be supported: querying CDRs that are generated within the specified time segment, exporting P2P and multipoint CDRs, and generating a statistical report by device or conference type.

3. Recording Server

Category	Specification Requirement
Recording	Supports H.323 and SIP conference recording and recording bandwidth of 128 kbit/s to 4 Mbit/s.
	Supports concurrent Rescording of at least 4 HD conferences and can expansion to 30.
	Supports H.264 , and H.263 video protocols and 1080p30, 720p60, 720p30, 4CIF, and CIF video formats.
Live broadcast	Supports concurrent live broadcast of at least 4 HD conferences and can expansion to 10.
	Support multicast for a live broadcast conference so that network bandwidth can be saved when multiple people view the conference at the same time.
	Allows users to view conference live broadcast using browsers on PCs, tablets, and mobile phones without installing a client plug-in or client software.

	Supports layout switch among modes such single-screen, dual-screen, and PiP.
Storage	Provides at least a 2 TB built-in hard disk to support recording of at least 4000 hours.
	Supports multiple file storage formats such as MP4, AVI, WMV
VOD	Supports filtering, querying, and sorting of VoD videos and allows users to download and save video files. Operation snapshots shall be provided.
	Supports Word, PDF, and PowerPoint files as conference attachments, and allows users to archive and upload conference attachments.
	Allows users to upload video files and release content.

4. Codec / Endpoint

Category	Specification Requirement
Overall requirements	Uses an embedded operating system (not Windows or Android, non-PC or industrial architecture).
	Supports ITU-T H.323 and IETF SIP protocols and has good openness and compatibility; supports both IPv4 and IPv6 protocol stacks.
Call bandwidth	Supports and provides the access rate that ranges from 64 kbit/s to 8 Mbit/s.
Video specifications	Supports a variety of video encoding protocols, including H.263, H.263+, H.264, H.264 HP, and H.264 SVC.
	Supports 1080p 50/60 fps, 1080p 25/30 fps, 1080i 50/60 fps, 720p 50/60 fps, 720p 25/30 fps, 4CIF, and CIF.
Audio specifications	Supports a variety of audio protocols, including G.711, G.722, G.722.1, G.722.1C, G.728, G.719, G.729A
Port requirements	Provides at least three HD video input ports and at least three HD video output ports. At least two types of ports (HDMI and VGA) are available.
	Supports t10/100/1000 Mbit/s self-adaptive network ports.
Security specifications	Supports H.235 signaling encryption using H.323, TLS and SRTP encryption using SIP, and AES-based media stream encryption to improve conference security.

Functions	<p>Supports the caption function to superimpose names, banners, and messages on video and customize the caption language, font, color, and scrolling speed.</p>
	<p>Invites a new user to a point-to-point conference. The call is automatically scheduled to the non-built-in MCU, without affecting the conference.</p>
	<p>Allows users to preview sites and define settings such as camera exposure, white balance, and video format on the endpoint's web interface.</p>
	<p>Displays remote video, local video, and dual-stream video separately on three displays all at the resolution of 1080p.</p>
	<p>Displays remote video, local video, and dual-stream video on a single display all at the resolution of 1080p.</p>
	<p>Supports the access of one VoIP audio site in a video call. This process does not require any MCU resources, strengthening the emergency response capability.</p>
	<p>Combines more than two local camera signals into 1080p video and pushes the combined video to remote sites. The detailed implementation plan shall be provided.</p>
	<p>Connect the high-definition conferencing terminals with one hardware-based screen content transmitters for achieving one-button content sharing. One terminal supports the connection with transmitters. The function is enabled by connecting to the computer through the USB interface. Images are sent to the terminal at the same time. It can also be routed as one-channel conference streaming without connecting the computer to the WiFi or occupying the network port.</p>