Desktop videoconference project status at 12/10/2006

Names: PS=Phil Steele, JS=Jamie Sunderland,PH=Paul Hii, KD=Kheeran Dharmawardena, NIS=Network Infrastructure Services, KT=Karen Taylor SS= Shared Systems, IMS=Identity and Messaging Services, EWS=Enterprise Workstation Services

Abbreviations: GK=Gatekeeper, MCU=Multipoint Control Unit, POC=Proof of concept, IPs= Internet Protocol adresses, Eps= Endpoints

Colours: Red=Urgent issues, Blue=Known issues, Grey=complete/solved Black=In Progress/to be done

Task	Description	Status	Who
1	**Establish Gatekeeper/Proxy at Clayton**	**Mostly complete - see sub-tasks**	**PH/NIS/JS**
1.1	Establish production class Linux server maintaned by Shared Systems in the ITS Data centre.	1/9/06 -SS completed server install (Fedora Core 5) on weboffice.its	SS
1.2	LoadGnuGK software and configure for proxying mode	4/9/06 - SS loaded gnugk-2.2.4. PH configured the gatekeeper.	SS/PH
1.3	Load Apache software for web interface to gatekeeper directory	4/9/06 - Apache installed and configured. Default page is public videoconference directory (http://gk.monash.edu.au)	SS/PH
1.4	Verify network connectivity to NACP controlled subnets	15/09/06 - It appears that the server does not have direct access into NACP subnets. Paul is liaising with NIS and Security group to solve	PH
		19/09/06 - Done	
1.5	Verify network connectivity to external Ips	6/09/06 - Repeated successful calls from NACP clients to external Ips	JS/PH
		Known issue: Home gateways may require setting Port-Forwading in the broadband router firewall settings. This needs to be documented, but we will not be able to provide instructions for all broadband devices.	
1.6	Verify that GK settings do not adversely affect Room Systems and TFSU Videoconference services	5/9/06 - Issue: GK cause connection problems when unregistered Eps dial to registered Eps. Calling Eps appear to be ringing but called Eps do not pickup. Solved by ArjReasonRouteCallToGatekeeper=0	JS
		12/09/06 - Issue: GK cause disconnection after a SignalTimeout period when unregistered Eps dial to registered Eps. Solved by downgrading gatekeeper from gnugk-2.2.4 to gnugk-2.2.3.	PH
1.7	Document and verify DR procedures.	Documented progressively.	PH
2	**Central Directory Service**	**Web Directory operational. UI needs review by client comms. Global Polycom/tandberg directory still to be installed.**	**PH/JS**
2.1	Extract current gatekeeper registrations and publish a web-based whitepages	5/09/06 - Queries gatekeeper for registered endpoints, then publish to website (http://gk.monash.edu.au) on demand	PH

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2.1.1	User Interface to be designed/approved by client comms	14/09/06 - Initial contact made: Review/Recommendations still to be done	KT/PH
		19/09/06 - Complete	PH
2.1.2	Show "In Call/Available" on web directory	6/09/06 - Complete	PH
2.2	Establish a central directory that can be used for PVX Software and room systems internal address book	18/09/06 - Polycom Readimanager is capable, but for cross platform resons it will be better to use the Tandberg TMS server to be provided by Medicine and maintained by TFSU	JS/TFSU
2.2.1	Adjust pre-configured client to use the central directory		PH
2.3	Directory should differentiate between Publicly Viewable registrations, Teaching spaces and "Executive"	6/9/06 - Web directory has authenticated access to different classes of endpoints.	PH
3	**Peer Gatekeeper with other gatekeepers to be able to call other sites via E.164 IDs.**	**Gatekeeper is peered with AARNet country root gatekeeper which is in turn peered with the International root gatekeeper.**	
3.1	Verify Calling Eps registered to AARnet GK	Calls can be made to VC systems registered with AARNET using the IP addresses of endpoints.	PH
		Calls can be made to VC systems registered with AARNet using the Global Dialling Scheme. E.164 number ranges need to be specified for more gracious routing of calls.	
3.2	(Out of scope) Investigate the possibility of calling VOIP endpoints registered to AARnet VOIP system	JS to contact Kewin Stoekeigt to discuss. Not done.	JS
4	**Establish a system so that Dvc users can easily make multi-party calls**	**2 Methods available. Ad-hoc non-booked rooms available through Monash. Booked conferences available through Monash TFSU and AARNet.**	
4.1	Establish "On-demand" dial-in rooms on the Monash MCU	Complete. 3 rooms created and tested. 1 voice switched, 1 Continuous Presence and 1 PIN protected. Users will have to book "PIN" conferences through TFSU to get the entry code.	
4.1.1	(Out of scope) While configuring the on demand rooms, it was discovered that it is possible to use the MCU as a V/VOIP to ISDN/Telephone gateway	This makes it possible to use PVX as a VOIP softphone. This has been tested even from Malaysia with excellent results, however the MCU is only capable of a maximum of 12 Simultaneous gateway calls and so this will not be released to the Pilot groups. Billing would be an issue here too.	
4.2	Gatekeeper peering with AARnet make it possible to call conferences on the AARnet MCU	AARNet Multipoint conferences are free to all members and can be booked via the web interface at http://www.aarnet.edu.au/services/video/	

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5	**Log all calls Source/destination/calltime**	**Complete: Call records can be displayed from a restricted access page on the gatekeeper**	
5.1	All calls are logged to CDR.log.	All call records in CDR.log are published on a webpage (http://gk.monash.edu.au/cgi-bin/admin/cdr.pl) accessible by gatekeeper administrators only.	PH
6	**Pre-configured PVX software and setup instructions**	**An initialisation file has been created, but still needs some futher refinement and inclusion into a single file download/setup package.**	
6.1	Include license key and GK info	Done	EWS/PH
6.2	Include config of global directory server	gab.monash.edu.au included.	PH
6.4	Test instructions for technical functionality	15/09/06 - Known Issue: By default the setup automatically selects the network adapter. It has been observed that this could be the wireless adapter or even a connected PDA. This causes GK registration problems and stop people from making calls:	PH
		15/09/06 - Known Issue: Some users will be behind a NAT (eg at home). This need to be documented in a "troubleshooting" document. Home and Office profiles may need to be use for some travelling staff.	
6.5	Test and refine instuctions for Usability and reduced customer input. It should "just work".	Sarah Kittmer and Karen Taylor will provide feedback on instructions. Other preferably non-technical Usability testers should be sought	SK/KT/PH
7	**Verify interoperability and publish instructions for other leading H.323 software - at least 1 for linux and Mac**	**Started: Still significant work to be done.**	
7.1	Linux environment	Ekiga (ex:Gnomemeeting) successfully tested by KD - still to be documented	KD
		Known Issue: Ekiga does not support H.239 Desktop Sharing and T.120 Data Sharing (People+content)	
		20/09/06 - http://its.monash.edu/staff/projects/desktop-vc/resources/ekiga.html	PH
7.2	Mac environment	Xmeeting successfully tested by JS in Mac Mini (intel) OSX 10.4 - Still to be documented	PH/JS
		Known Issue: Xmeeting does not support H.239 Desktop Sharing and T.120 Data Sharing (People+content)	
7.3	Windows 2000/XP	Microsoft Netmeeting tested by JS/PH.	PH/JS

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		Known Issue: Netmeeting users registered to the GK can only call other users registered to the GK. They cannot call external IPs unless they unregister from the GK. NACP will then block them on Monash client subnets.	
8	**Authenticated registration to Gatekeeper**	**Initial discussion only**	
8.1	Investigate authentication to MDS/Hybrid	Polycom PVX does not support username/password authentication. Kewin Stoekeigt's implementation only match H.323 ID, E.164 and IP address to H.350 directory. Ep do not provide user feedback when authentication fails. It may not be feasible to implement authentication.	PH
8.2	Investigate how non-Monash users are catered for	Open system at present. Refer comments in 8.1.	PH/JS/IMS
8.3	Investigate the potential of linking to Eduroam authentication	not started	PH/NIS/IMS
9	**Replicate and link similar system in Malaysia**	**Started: Working with performance issues.**	
9.1	Establish server	Server established, however performance issues may require a move to another server	JS
9.2	Gatekeeper peering and cross-gk calling	GK peered with Monash and AARNet. Able to call Monash endpoints and AARNet Bridge/endpoints.	JS
9.3		Known Issue: Only MCU rooms that are defined in the H.323 ID (E.164) settings in the MCU can be called. This is a maximum of 4 rooms. The gateway functionality is not available from MUM.	JS
9.4	Connectivity to MUM clients from Clayton	With MUM GK registered as a gateway endpoint to Monash GK, it is possible to call Eps on Private Ips with registered prefixes. This requires MUM Eps to have unique E.164 numbers (or potentially use GDS.	JS
9.5	Directory sharing	Currently MUM registered EP do not show up in the Monash VC Directory. A sub-directory will need to be created for MUM registered Eps	JS
9.6	Bandwith control and resource allocation	Not investigated yet.	JS
10	**Alpha testing for 1 month with School of Rural Health and selected ITS staff**		
10.1	Seek support of Medicine in Piloting with Rural Health	Initial meeting held.	
10.2	Alpha testing survey.		PH/JS
10.3	Alpha testing report.		PH/JS
12	**Beta test for 1 month - with business benefit analysis with Faculty of Education**	**Not started**	

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13	**Report on technical abilities/issues for production service**	**Not started**	
14	**Report on business benefit and client impact for production use**	**Not Started**	
15	**Client Communications / Publicity**	**Not Started**	
15.1	Initial project presentation to IT Managers Forum		
15.2	1/2 day workshop - Recording and Broadcasting lectures	29/09/06 Presented Desktop Video Conferencing Pilot Project at workshop.	
16	**Documentation and other tasks**		
	PH to document known issues on project website		