



Desktop videoconference project status at 24/10/2006

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 addresses, Eps= Endpoints

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

Summary Status: The technical aspects of the project are largely complete. The key issue now is to ensure that we have sufficient use
 by non-technical end-users in the pilot groups to adequately identify user issues before considering for production release.

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 maintained 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-Forwarding 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



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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
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 reasons it will be better to use the Tandberg TMS server to be provided by Medicine and maintained by TFSU.	JS/TFSU
		23/10/2006 Tandberg TMS server delivered. To be setup by EWS.	
2.2.1	Adjust pre-configured client to use the central directory	24/10/2006 -waiting on TMS setup	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.	



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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/	
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 further 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)	



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		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
		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
		24/10/2006 - Since may clients (including PVX) do not support authenticated registration, it was decided not to continue pursuing Authentication.	
9	Replicate and link similar system in Malaysia	Started: Working. Integration progressing.	
9.1	Establish server	Server established, however performance issues may require a move to another server	JS
		24/10/2006 New higher spec GK server established in Malaysia	
9.2	Gatekeeper peering and cross-gk calling	24/10/2006 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 with specific prefixes (or potentially use GDS).	JS



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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. Several Rural Health people have downloaded and tested the PVX client successfully	
10.2	Alpha testing survey.	Paul has created a sample survey to send out to rural health staff.	PH/JS
10.3	Alpha testing report.	Not started. To date there is insufficient use of the system by rural health to be	PH/JS
12	Beta test for 1 month - with business benefit analysis with Faculty of Education	Initial meeting held with Sue Willis, Peter Lawford, David Yammouni, Phil Steele, Linda Dawson.	
		24/10/2006 Education and Linda (Researcher) feel 1 monthpilot is insufficient, particularly at this time of year. They have requested that the pilot be extended until March.	
13	Report on technical abilities/issues for production service	Not started Expected by early November	
	Technical load testing and limits	Simultaneous call setup testing done. Load testing in network utilisation and CPU load expected next week	
	Resilience and service expansion options		
	Ongoing Service support and costs		
14	Report on business benefit and client impact for production use	24/10 Initial Meeting held with Linda Dawon who will do this part. She is adamant that the timing of this is wrong and that the pilot must be extended to the first 3 months of next year to acquire adequate information.	
15	Client Communications / Publicity	Not Started	
15.1	Initial project presentation to IT Managers Forum		JS
15.2	1/2 day workshop - Recording and Broadcasting lectures	29/09/06 Presented Desktop Video Conferencing Pilot Project at workshop.	JS/PH



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	Scope of service marketing and communications.	23/10 Jack and Tom have indicated that the scope of the pilot must be kept as small as possible (which makes it hard to get actual usage and testing). Also they have recommended that the service not be promoted to the general Monash community, but just Faculty IT managers.	JS
16	Documentation and other tasks		
	PH to document known issues on project website	Continually updating	PH