

IT REQUIREMENTS - LOGICAL LAYOUT

Data Transfer (24/7 real time connections)			
IP	DNS Name (URL)	Port	Protocol
120.29.244.52	portal0.imseismology.org	5080 50443	http https
120.29.241.81	portal5.imseismology.org		
196.44.37.99	portal1.imseismology.org	80 443	
41.0.209.203	portal2.imseismology.org		
196.22.244.59	portal3.imseismology.org		

Software Update Centres			
IP	DNS Name (URL)	Port	Protocol
196.44.37.98	updates.imseismology.org	80	http
	devupdates.imseismology.org		
	software.imseismology.org		
	downloads.imseismology.org		
	www.imseismology.org		
120.29.244.52	software0.imseismology.org	80	http
120.29.241.81	services.au.imseismology.org		
	updates5.imseismology.org		
	devupdates5.imseismology.org		
	software5.imseismology.org		
	downloads5.imseismology.org		

Other IMS servers			
IP	DNS Name (URL)	Port	Protocol
120.29.244.52	licensing0.imseismology.org	8005 48005	http https
196.44.37.100	licensing1.imseismology.org		
41.0.209.204	licensing2.imseismology.org		
120.29.241.81	licensing5.imseismology.org	80	http
196.44.37.100	issues.imseismology.org		
196.44.37.101	myservices.imseismology.org	443	https
41.0.209.203	portal4.imseismology.org	8010	https
	mobile.imseismology.org		

Remote Access				
Option 1) Direct ssh access restricted to IMS public IPs				
	Source IP	DNS Name (URL)	Destination Port	Protocol
	120.29.244.52	access0.imseismology.org	22 or other configured remote port	ssh
	196.44.37.100	access1.imseismology.org		
	41.0.209.204	access2.imseismology.org		
	120.29.241.81	access5.imseismology.org		
Option 2) VPN setup to customer network				
	VPN account allowing access to all the ports of the seismic server			



Customer
Workstations (PC)

Communication between Workstations and Seismic server		
Function	Port	Protocol (tcp & udp)
SSH connection between server and equipment	22	ssh
Remote administration	80	http
Ports to interface Software application with seismic server	8001 - 8020	http
VNC Remote viewer ports	5901, 5902	tcp & udp
No Machine Remote viewer ports	4000	tcp & udp
File Sharing	137, 138, 139, and 445	UDP, TCP, SMB, CIFS

Seismic Server

Network Time server		
IP or URL	Port	Protocol
Internal or external Time server address	123	tcp,udp, ntp

Communication between Seismic Server and Seismic Equipment		
Function	Port	Protocol (tcp & udp)
Ping		ICMP
Remote administration	80	http
Communication protocol between seismometers and seismic server	8001-8003	http
	8989	tcp, udp
SSH connection between server and equipment	22	ssh
Telnet session between server and equipment	23	telnet
File transfer	69,20-21	fttp, ftp
Communication protocol between 3 rd party communication equipment and seismic server	4000-4002	tcp, udp
Timing protocols to seismic equipment	123,319-320	udp,ntp,ptp
- PTP system require IP multicast		

Customer

Seismic equipment
(incl. IMS branded devices)

Non-IMS external sources			
IP	DNS Name (URL)	Port	Protocol
Country specific	archive.ubuntu.com	80	http
Country specific	security.ubuntu.com	80	http
Country specific	ntp.ubuntu.com	123	ntp

- Outbound connections from customer to IMS
- Outbound connections from customer to non-IMS source
- Inbound connections to customer from IMS
- Local traffic in customer network