Networking Description for PASE 2007 Ops Center Christmas Island

6/1//2007 Joe Vinson

Brief Network Description:

The network On Christmas Island will consist of a secured network in the OPS CENTER and expanded to parts of the hotel via a wireless access point. We have contracted for a satellite access receiver that will provide 1megabit up/ 512ibit down. Users will be allowed to connect to this network after their machines are vetted for patches and virus definitions. Please patch your clients prior to coming to Christmas Island.

The wireless access point will be designed to cover some of the Captain Cook Hotel areas.

A small computer user kiosk will be connected to this network composed of two windows XP clients. These will be general-purpose machines only for casual use. If a network kiosk computer has a problem and it cannot be resolved quickly, we will just reinstall the software.

Users should not leave any of their work files on these kiosk machines.

Rules for the Protected Network

The Protected network will be set up behind a firewall appliance that will protect the network from various types of attacks. It will also monitor the internal network for signs of unauthorized network activity. Most incoming ports will be blocked.

Linux users who wish to connect to this network must have their Operating Systems updated with the latest kernel and application patches.

Microsoft windows users must ensure their virus definitions, patches and applications are up to date. Real time protection must be enabled .

Macintosh users must keep their OS and applications updated.

Approved OS list:

Windows XP service pack 2 with current antivirus software Linux RHEL 4 or 5 with the most recent kernel and updates CentOS 4.4 or later, completely up2date Fedora core 6 with most recent kernel and updates MAC OS X with most recent patches and updates Solaris 9 or 10 with most recent patches and updates

Services Provided by CDS staff:

IRC Chat service: A local chat server that will connect to the CDS chat server

File storage: 500gbytes of file storage

EtherApe network monitoring: a graphical network traffic tool to monitor network activity, use and abuse.

DHCP Service: A dhcp server will allow users to connect to the network after they have been properly vetted.

Firewall protection: We will run a firewall to protect our machines from various types of attacks.

NAT: Network address Translation for our client machines

PROXY: Network proxy to store frequently visited web pages to save network bandwidth. Users must point their web browsers to this proxy to gain Internet access.

Network Connectivity: Copper 100mbit network to attach clients in the OPS center and Wireless access points in several areas of the hotel and OPS center.

BACKUP services: CDS staff will mirror the data to a secondary storage device for safekeeping.

LCD projector: We will provide a LCD projector and screen

Computer KIOSK: A small kiosk of computers for general-purpose use

UPS Power: We will provide UPS power for our CDS servers only!

PRINTING supplies: We will provide a color printer and some paper, but please don't waste the printing supplies

More importantly: Services we do not provide:

License servers: We will not provide any license servers or services for application you might bring with you. If you have an application you need, you are responsible for the licensing. Make sure the application runs on its own on your client before you bring it to the island.

Spare parts for your equipment: We will not provide any spare parts for your client machines, so bring your own spare parts.

Network cabling: We bring lots of cables, but you should bring at least one cat 5 cable for each client your bring so we don't run out.

UPS power: We do not provide UPS power for your client. If you want UPS power for your workstation, bring it with you.

Wireless Access Cards and adaptors: We do not provide wireless access cards or adaptors for your laptop or workstation. We might recommend a long range wireless device after we do some testing.

MEDIA: We do not provide cd-rw, dvd, floppy disks or other types of media. Please bring your own.

Cell Phones or Iridium Phones: We do not provide cell phones or iridium phones for general purpose use. Please bring your own if you need one.

Mail service: We will not be providing any imap, pop or smtp services on the island. Users may use VPN to access their email servers from their home institutions. We will operate much like an Internet café in this regard.