

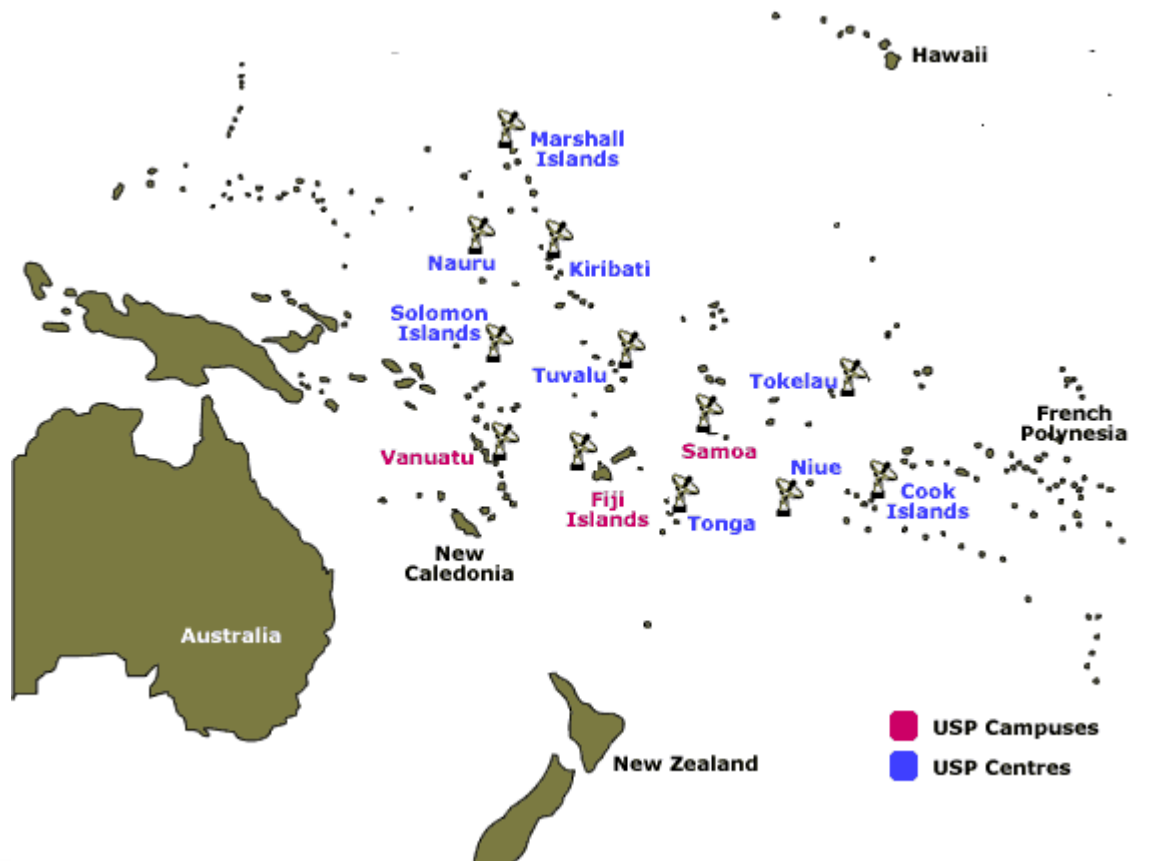
E-Learning @ USP

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About USP

USP established 1968 to serve 12 regional member countries.



About USP

Unique Regional Scope;

Covering thousands of islands over 33 million square km of ocean

Around 2 million people and hundreds of distinct cultures

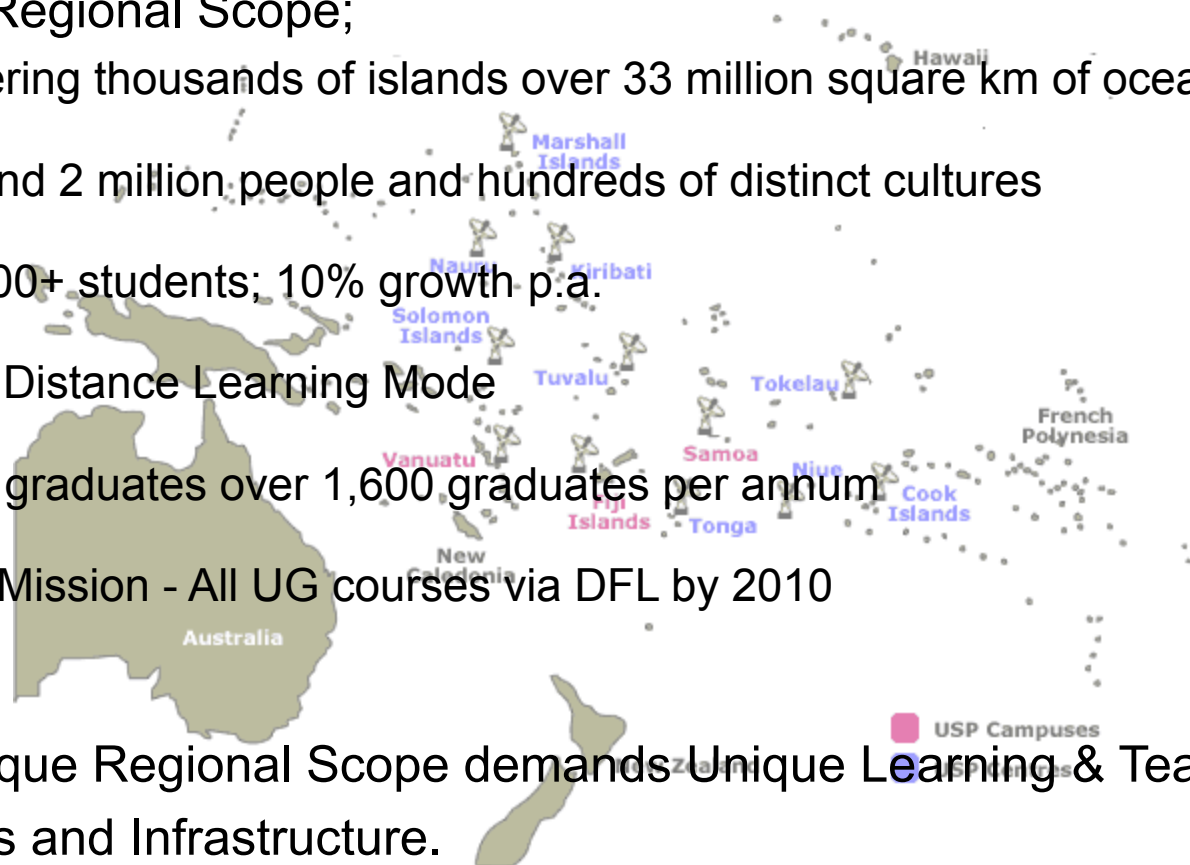
20,000+ students; 10% growth p.a.

50% Distance Learning Mode

USP graduates over 1,600 graduates per annum

DFL Mission - All UG courses via DFL by 2010

This Unique Regional Scope demands Unique Learning & Teaching Solutions and Infrastructure.



Distance & Flexible Learning (DFL) @ USP

Print-based – traditional / most common:

Paper based

Study Guides

Introductory & Assignment Booklet

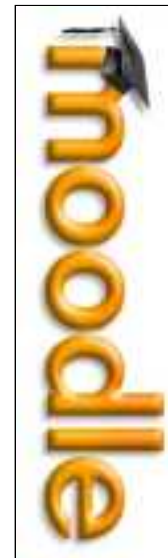
Text Book



- **Audio-Video Conferencing / Broadcast:**
 - Lectures Broadcast (1way)
 - Tutorials interactive (audio mostly).
 - REACT System 2010.

Distance & Flexible Learning (DFL) @ USP

- Online Learning:
 - USP's Learning Management System based on Moodle since 2007; after stints with Edison, WebCT from 2001.
 - Primarily a supplementary mechanism for face to face and/or Print mode – exceptions some Law, CS/IS and Journalism courses.
 - CFDL administers Moodle USP-wide with IT Services providing backend support, e.g. server management, storage.
 - <http://elearn.usp.ac.fj> (Guest Login Avail)



E-Learning Research

- Enhanced e-Learning:
 - Discussion Forums.
 - Staged learning with reinforcement and testing.
 - Online tools & Simulations
 - Educational games

- M-Learning:
 - Using mobile phone technologies.
 - Critical class administrative information.
 - Web Interface on SMART phones



Blending Modes

- **Flexi-School:**
 - Intensive 5-6 wk face-to-face.
 - Usually held in between semesters.
 - Regional campus focus.
 - Smaller numbers / better focus.
- **Blended Modes of Delivery**
 - Combination of print, face to face, e-learning to offer a cocktail of delivery methods.
 - Can be tailored to a particular discipline to improve learning effectiveness.

Education for Sustainable Development

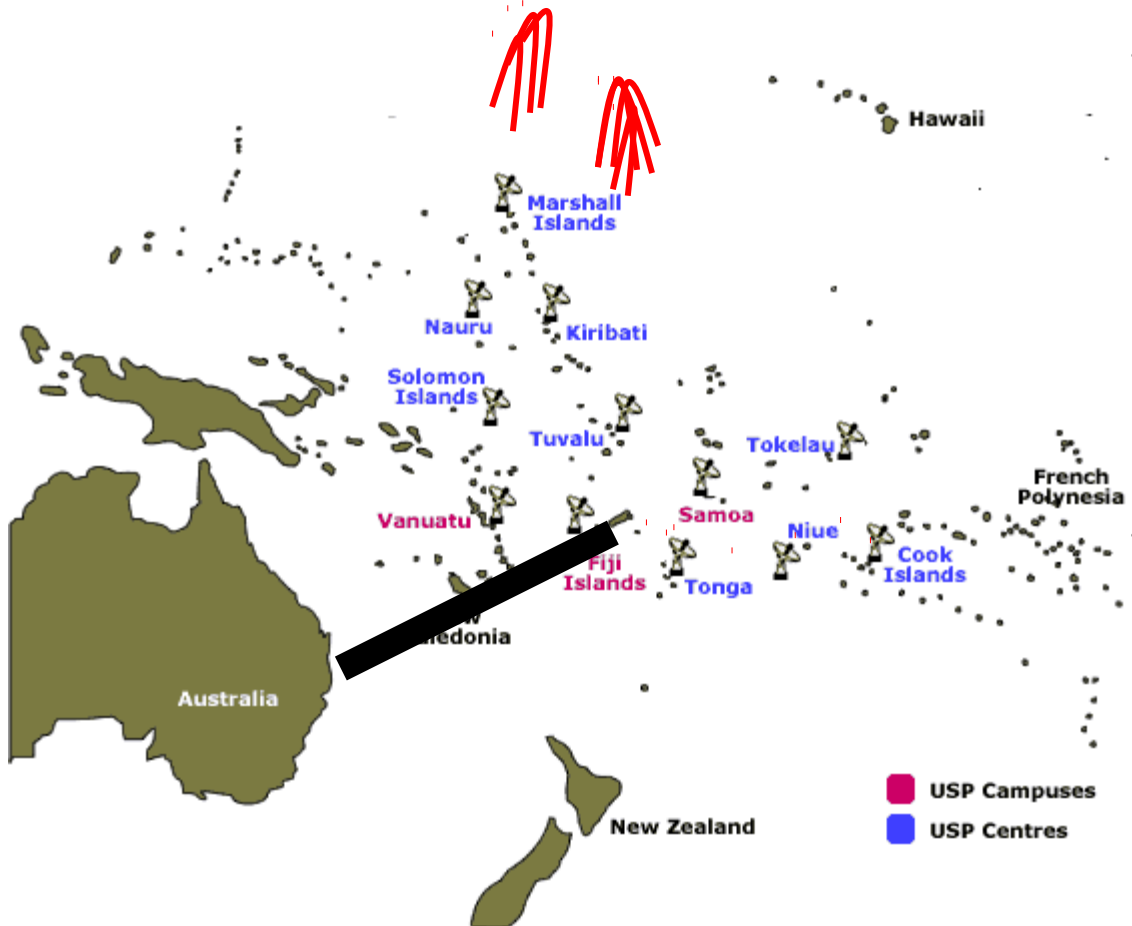
Mainstreaming ESD

EDULINK project on ESD – developing a number of PG courses

USP facilitating ESD in the region – PIF Ministers of Education

Major efforts to develop PG courses in DFL courses (with online component)

Facilitating Infrastructure - WAN



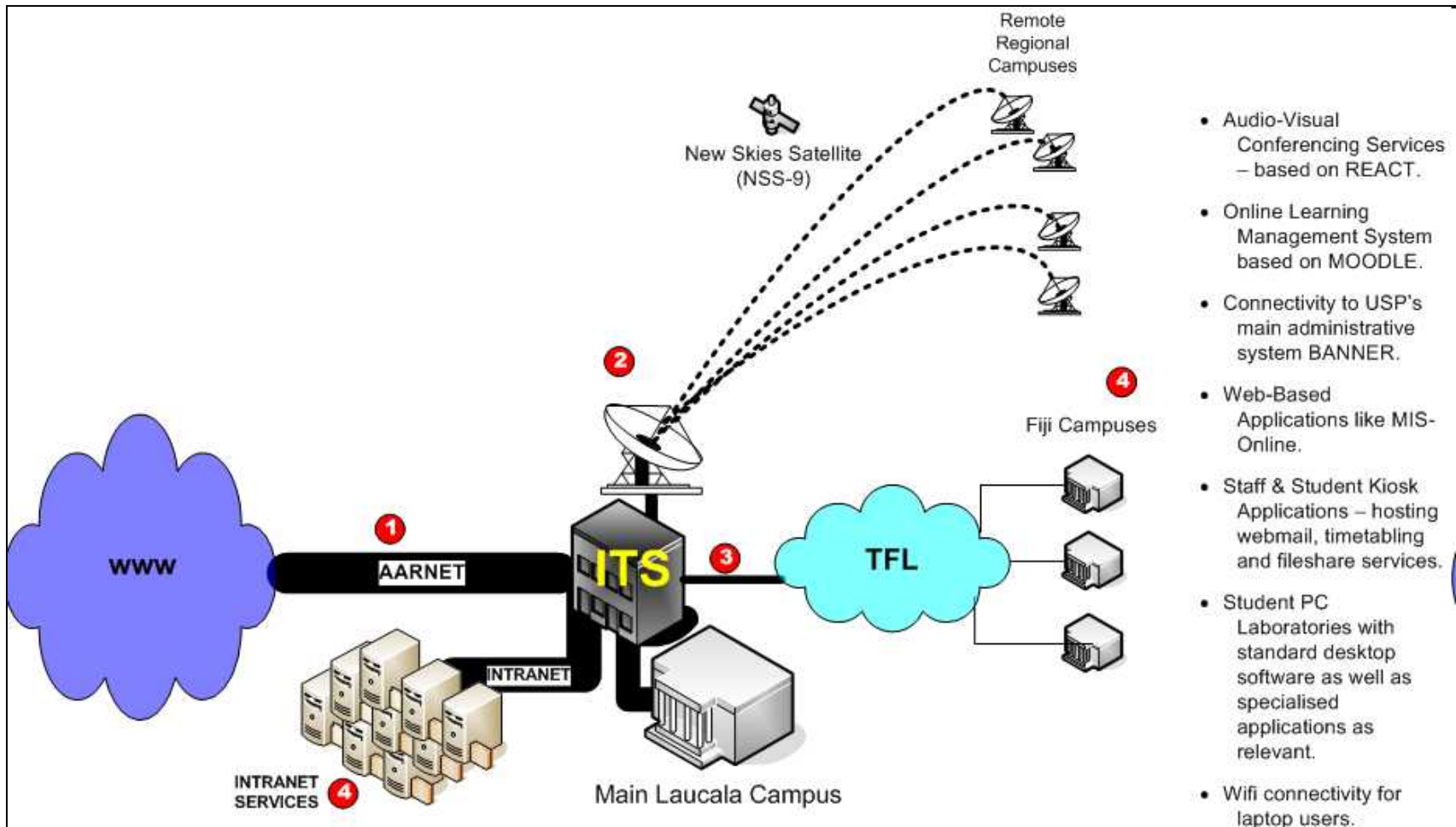
Satellite

- IP VSAT system.
- iDirect Evolution
- 9.6MHz NSS-9
- Ku-Band Expansion July 2011.

AARNet

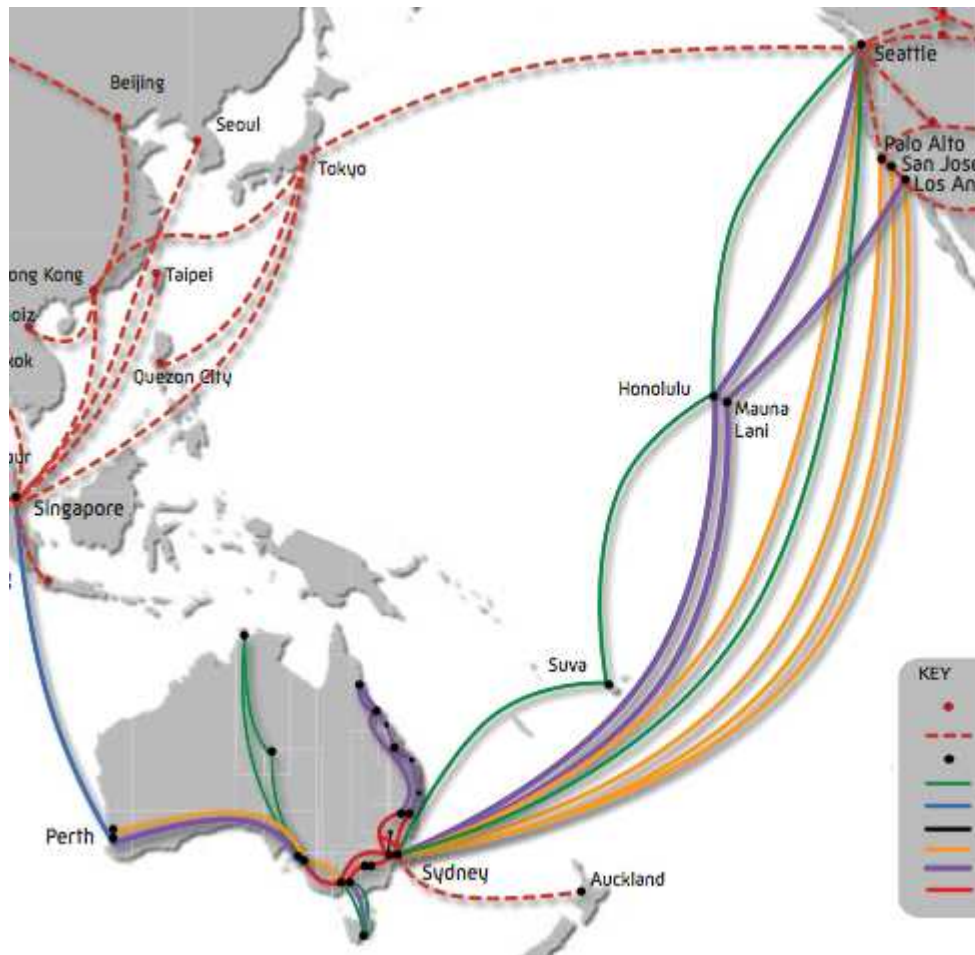
- Provides USP's Internet Backbone
- STM-1 / 155Mbps
- Onward connectivity to rest of world..

Facilitating Infrastructure - WAN



- Audio-Visual Conferencing Services – based on REACT.
- Online Learning Management System based on MOODLE.
- Connectivity to USP's main administrative system BANNER.
- Web-Based Applications like MIS-Online.
- Staff & Student Kiosk Applications – hosting webmail, timetabling and fileshare services.
- Student PC Laboratories with standard desktop software as well as specialised applications as relevant.
- Wifi connectivity for laptop users.

AARNet - Australian Academic Research Network



Global Research Connectivity

This new link provides direct access to research and education networks in Australia, North America and Japan via AARNet's interconnection points in Sydney, Hawaii, Seattle and now Suva - and from these to the global research and education community worldwide.

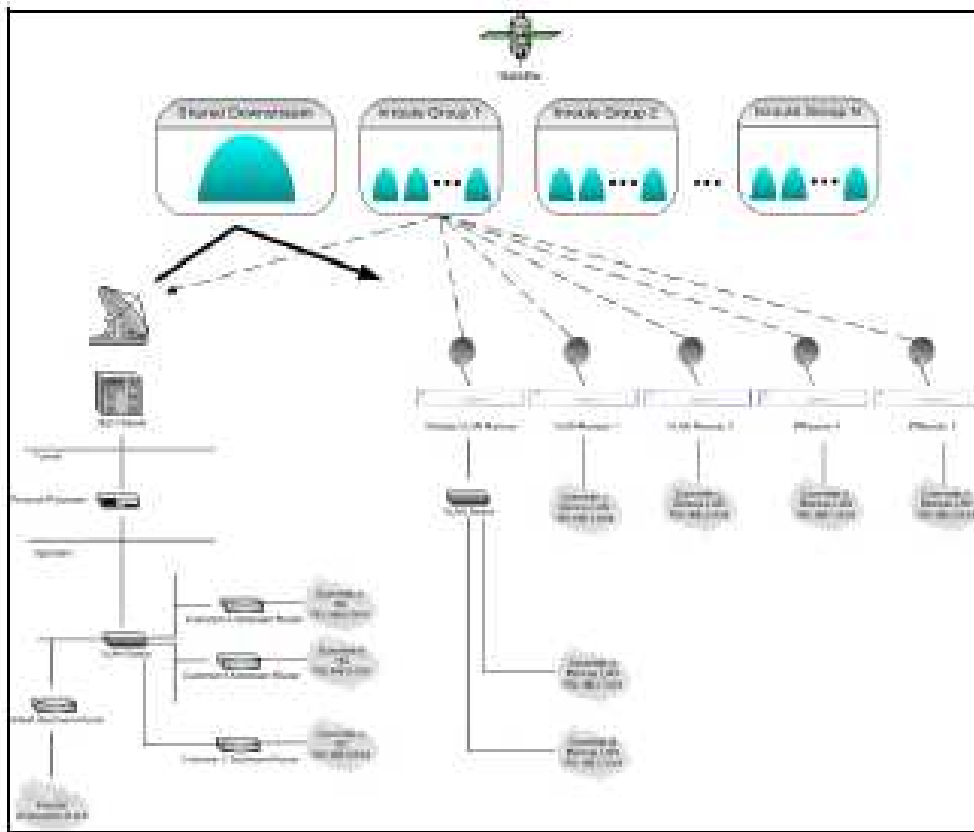
Scalable Capacity:

Currently STM1 (155MBPS)

Development Resource:

AV Conferencing

iDirect Evolution VSAT



- Capacity
 - 12Mbps Down
 - 4.5Mbps Up
 - 3-fold increase

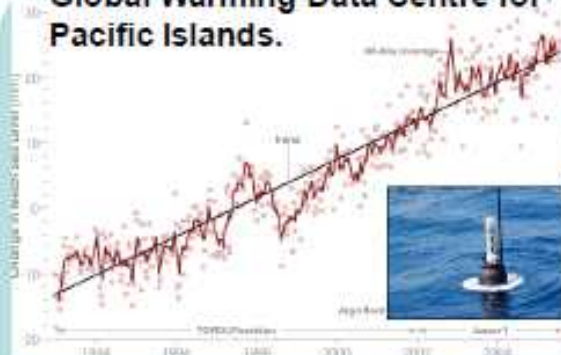
- QoS Control
 - Seamless transition of network priorities across WAN.

- Scalability
 - Ku-Band expansion to remote sub-campuses.
 - Cost Efficient.

Japan-Pacific ICT Centre

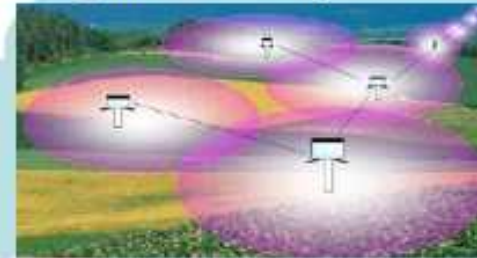


Global Warming Data Centre for Pacific Islands.



Using RMR Thinktube technology for Wifi Mesh Control Points on each Pacific Island.

Neural Networks for USP Agricultural Campus



Using RMR Thinktube technology for Wifi Mesh Control Points.

The Japan Pacific ICT Centre



Renewable Energy Research Facilitation.



Using RMR Thinktube technology for Wifi Mesh Control Points.

Data Storage & Analysis Systems



WWW

USP Japan-Pacific ICT Centre being a centre of excellence for Environmental Issues affecting the Pacific and the Globe.

Facilitating Infrastructure

- Network:
 - Ethernet + 802.11 + Fibre
 - ARGENT Monitoring + PRTG / Netflow
 - Issues:
 - WAN Links & QoS
 - Resiliency /DRP Investment.
 - Removing single points of failure
 - Security / Monitoring:
 - Overall Framework
 - Nagios NOC (JICA)
- Systems/Applications:
 - SAN Storage.
 - LAMP (Linux, Apache, MySQL, PHP) House.
 - Administrative System – Sungard



USPNet Network Engineers working on LAN in Laucala Campus.

USP Challenges



Regional Bandwidth Bottleneck.

Regional Fibre / O3B

ICT Staff: Disparate ICT Standards & Training:

Regional Telco Partnerships

Basic Regional PC Resources & Laboratory Facilities.

Regional Logistics / Vendor Management.

Enterprise-grade Network:

ITIL Standards

Research & Development Resource

Japan-Pacific ICT Centre.

Vinaka - Sa Oti!

Questions?