AFIX-TF report

Technical Workshop – Gaborone Botswana

Report

The African Internet Exchange Task Force (AFIX-TF) held a two-day technical training workshop in Gaborone Botswana on Thursday 19 May and Friday 20 May, 2005.

All background information and other documents as well as all workshop content pertaining to the Technical Workshops facilitated by AFIX-TF can be found at URL: http://afix.afrispa.org

Workshop planning

The process of planning all workshops is outlined in the hosting requirements documentation (http://afix.afrispa.org/technicaltraining/Hosting_requirements.pdf). Much of this process was developed through the experience of arranging this particular workshop. Each of these steps is included in the checklist and was followed in the preparation and planning for this workshop.

a) Fill out IXP survey form: Russel Southwood introduced key Botswana ISPs to Brian Longwe in January 2005. After introduction and exchange of a few emails AFIX-TF followed up by providing them with the IXP survey, which was duly completed by Stuart Brown (VBN Services) on March 8, 2005.

b) Secure buy-in from Internet community: Buy in to this concept was obtained at initial discussions and agreement to establish BISPA, the Botswana Internet Service Provider Association.

c) Find and book venue: completed by Stuart Brown of VBN services, a BISPA member.

d) Confirm dates with AFIX-TF: done by Stuart Brown

e) Send out invitations: done by Stuart Brown

f) Confirm participants: done by Stuart Brown

g) Send list of participants to AFIX-TF: Not done although most desirable. It saves from completing this work after the fact and helps trainers prepare.

h) Offer advice on transport arrangements and accommodation for trainer(s): done by Stuart Brown

i) Confirm arrival dates and pickup arrangements for trainer(s): done by Stuart Brown

j) Confirm availability of nine (five) desktop PCs, to spec, from at least two days before workshop: done by Stuart Brown and the other Stewart Anderson from ITI another BISPA member.

k) Arrange all equipment import permit: not required since William Stucke brought this in his car. The equipment urgently requires cases for shipping.

We have not tested this yet and since equipment is so important to this training it was recommended

l) Secure storage arranged: done by Stuart Brown as part of the venue arrangements

m) Additional equipment procured and available

n) PCs tested: before they were delivered by ITI.

o) Refreshments arranged: finalised on day 1 and done by Stuart Brown as part of hosting arrangements.

p) Email download instructions to participants: this was not yet in place. It must still be tested.

q) Write workshop CDs for participants: done by Alan Levin and some additional Cds were required at the venue for late additions.

r) Help trainer set up venue and test all equipment: done on setup day by support from ITI.

s) Arrange welcome and registration: BISPA arranged.

Figure one (on page 4) shows the arrangement setup in an approx 70 sqm room. This is the minimum size room that the equipment and setup will fit and in fact it would only fit 6/8 student routers and would not have fitted all the equipment.

Workshop delivery

The first flight - from Cape Town - arrived at 9am and trainers Alan Levin and Alan Barrett checked in at the hotel Gaborone Sun, and went straight to the setup. Introductions were quickly over and setup began. Trainer William Stucke arrived soon after the PCs were being installed bringing the equipment in his van. That evening the final trainer Mark Tinka arrived.

The Gaborone Sun was chosen as the venue and although it was deemed most expensive, it was within per diem budget and provided a convenient location where both the trainers could stay and deliver the workshops.

Workshop venue

The venue report is made in consideration of the criteria as specified in the hosting requirements documentations.

The classroom must be lockable, with two keys available for use by instructors or other AFIX-TF staff from the beginning of the setup days. The area should be patrolled by security guards: Although there were some security people seen and all the equipment was safe, there was initially no clear lines of responsibility for the holder of the key and only one key was ever made available. Although this was not a serious factor in this case, in less secure environments it should not be overlooked.

Multiple electrical outlets distributed throughout the room, preferably on separate circuits:This was a problem – albeit not major – in that there were only three outlets and not all were on separate circuits. These tripped and fell over during

the setup day and the overload breakers were bypassed. This resulted with some minimal downtime in the entire convention centre on day 2.

Overhead lighting, preferably fluorescent tubes: Good lighting was available. At certain times the lighting could be dimmed for presentations.

Stable power supply, with provision for backup generator/UPS: As mentioned above, this is an area that needs to be well appreciated. It is not until we arrive that people realise the power requirements.

Laser printer with fresh toner cartridge and a spare, with at least one ream of paper: This was essential and although it was not network enabled, we managed to move around to all get to print the last minute handouts.

A projection screen with stand: An electric screen was provided. It was down the whole time.

Flip chart with stand and markers: Pentel brand erasor with pens and holder at back caused a stir.

A medium to large white board with stand: the flip chart was more useful although in future a whiteboard will suffice.
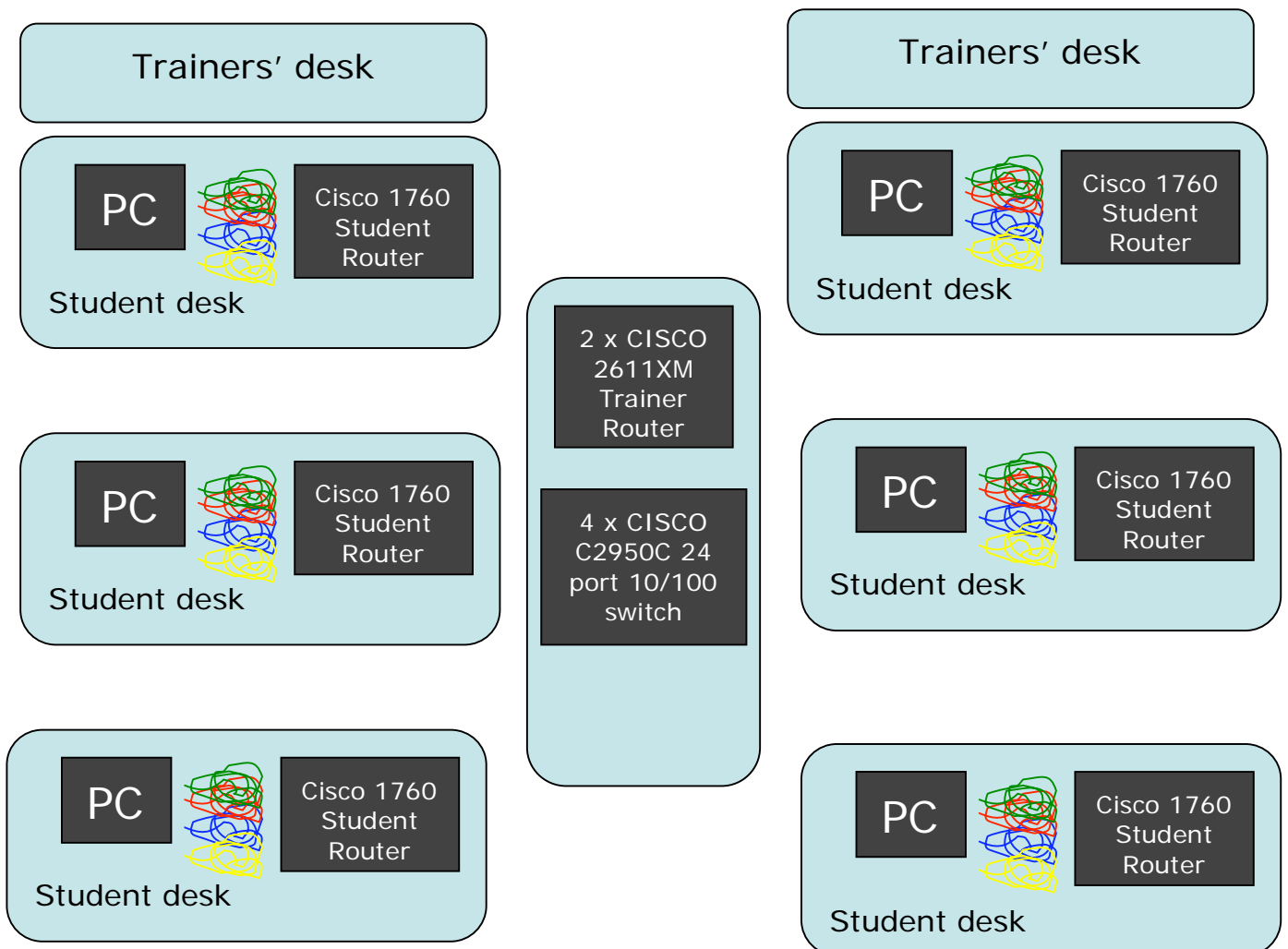
Air conditioning: Good. Although we still found ourselves warm or chilly.

An Internet connection would be an advantage but is not a prerequisite: a fixed (wireless) link was sponsored by vbnservices and well used. Where Internet access is not available after hours some kind of access must be arranged (to be updated on requirements),

Workshop attendees

Name	Organisation	email address
Stewart Anderson	ITI	stewart@itibots.com
Tiro Tlhokwane	HPS	tiro@hps.bw
Zubair Chougle	IT Sol	zubair@itsol-africa.com
Grant Shand	VBN	grant.s@vbnservices.net
Kebabeileng Lebalang	UUNET	lebalang@uunet.co.bw
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Sexton Segobaetso	BTA	segobaetso@bta.org.bw
Pabalelo Moremi	DIT	pmoremi@gov.bw
Kedimetse Thebe	DIT MCST	kthebe@gov.bw
Cheewai Lai	DIT, MCST	clai@gov.bw
Sylvester Chibamo	Botsnet	sylvester@botsnet.bw
Robert Cordner	Geosat/Itsol	robert@bizbotswana.com
Botswana IXP list	bixp	bixp@molapox.net

Figure one: Illustration of the setup in the room.

Trainers' desk		Trainers' desk
Student desk PC — Cisco 1760 Student Router	2 x CISCO 2611XM Trainer Router 4 x CISCO C2950C 24 port 10/100 switch	**Student desk** PC — Cisco 1760 Student Router
Student desk PC — Cisco 1760 Student Router		**Student desk** PC — Cisco 1760 Student Router
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The cables on each student desk are used for various configurations in the exercises. These cables are colour coded for ease of use:

Blue -   fast serial cables (connects upstream to student) 24 CAB-SS-V35FC V.35 DC DCE female + male

Red –   crossover CAT5 ethernet, 1m

Grey   CAT5 ethernet 20m

Green - CAT5 ethernet 10m

Blue   CAT5 ethernet 5m

Yellow - CAT5 ethernet 3m

Outcomes

• As instructors, we recognised the need to add more information about the registrations with AfriNIC and the processes to apply for both address space and as numbers.

- All attendees felt encouraged, supportive and both comfortable and competent to connect at a full mesh internet exchange point (IXP).
- Lengthy discussion was held about an IXP policy. Although there was a great deal of theory covered, this was of most practical use,
- A firm commitment was made to get the Botswana IXP functional within a two month timeframe.

Evaluation

Of a total 14 attendees, nine completed evaluation forms were collected at the end (64% of attendees completed and handed in evaluation forms).

The analysis of these evaluations shows that the average level was

All sessions obtained an average of over 4 (out of 5) meaning that all sessions were considered more than good. (scale: 5 = Excellent, 4 = Good, 3 = Average, 2 = Poor, 1 = Very poor)

On the overall scores the following questions were answered by all evaluations:

How did you find the length of the workshop?

- 6 (67%) found it about right, 2 (22%) found it too long and 1 (11%) found it too short

How did you find the pace of the workshop?

- 1 [11%] found it too slow and 89% found it just right, none found it too fast

How satisfied were you with the organisation of the workshop?

- 6 (67%) were somewhat satisfied and 3 (33%) were very satisfied

Next Steps - follow-up

The equipment appears to be excellent and with exception of consumables, there are no further pieces required. The one item that remains outstanding and will be required for airfreight is solid containers/trunks – with wheels - for the packaging and shipping of the equipment to other locations.

There were a number of sessions that require updates. Sessions T2 and T8 have already been updated to fix some small refinements. Sessions T3-4 and T5-6 require more technical rewriting. Alan Barrett has volunteered to assist with this and it must be completed before end of June.

It is worth noting that a couple of the sessions (T2 and T8) that are reframed for the decision makers workshop, were successfully tested at the ISPA workshop. Nonetheless a full AFIX-TF decision-makers workshop is yet to be held in order to have a similar pilot experience.

Thanks for the opportunity, we confidently look forward to seeing the BIXP functional and moving more traffic than most of the other African IXPs.