ISSUE

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eT4L in Secondary Schools update

eT4L migrations are continuing in secondary schools and by August 10, **200 schools** will have been completed. A further 120 schools have been scheduled for migration over coming months.

All completed schools have received LAN Remediation work including **cabling repairs and new network switches** where required. In total to date, schools partnering for additional networking upgrades have contributed almost $1,000,000. This has highlighted the **great opportunity** that migrating schools have in improving their overall network infrastructure. eT4L schools will also be enrolled in our switch monitoring and management service to provide proactive network support and future planning options.

HOW DO I GET MY SCHOOL ON THE eT4L SCHEDULE?

If your school is not yet scheduled for eT4L migration, please call or email the **eT4L Secondary site migration contact** in your area.

Planning for T4L Rollout—Understanding your fleet

With the upcoming T4L rollout notifications, it's an opportune time to start considering your school's device needs. As a reminder, Windows desktop, laptop and tablet computers as well as Apple Mac desktops and laptops are excluded from *Local Schools, Local Decisions* and must be ordered from the DoE Procurement contract. This ensures compatibility with DoE systems, centrally-managed vendor warranty services with on-site provisions and support via the ICT Service Desk.

Some questions you should consider before determining your T4L rollout order:

- *How many computers are still on your network that are out of warranty?*
- *How old are they?*
- *What type are they? (Desktop/Laptop)*
- *Where are they and who uses them?*
- *What are they used for? (system needs)*
- *Do they need replacing?*
- *Should they be replaced with new or existing computers?*
- *Where should the newest computers go?*
- *Is there sufficient WiFi access at school?*
- *What software will be needed on the new computers?*

By answering these questions, you'll have a better understanding of your T4L rollout equipment needs and order the most appropriate computer devices.

You'll also be constructing a plan so that when your order arrives, you'll know exactly what needs to be done with your new equipment to allow it to be used right away, rather than leaving it in a storeroom.

Desktop computer changes

Please note that technology has progressed and neither the Windows desktop PCs, nor the Apple iMac desktops now include a DVD drive to play or record discs. If there is a need to use DVD discs in specific locations, it's best to ensure older desktops with these drives are available in these locations. Alternatively, where required, simply invest in external USB plug-in DVD (**optical**) drives that are inexpensive peripheral devices, **available via the DoE Procurement contract**.

T4L Takeback Program

Remember that all T4L Rollout and contracted discretionary purchase computers come with a 1:1 takeback that has been negotiated with each vendor. This provides schools with a great option to dispose of their old equipment for a three-month period following delivery. The computer equipment to be returned is a flexible "one for one", *e.g. you could buy one laptop and return one desktop*. Information about the takeback options for each vendor will be provided.

MS Office 365 professional learning resource

Learning Systems has published a new resource for teachers called *Teach and learn with Microsoft*. It provides a starting point for teachers wanting to incorporate Microsoft's collaborative learning tools such as Office 365 into the classroom as well as a curated overview of available support. It also highlights each tool's context for teachers and students.

The resource provides:

- instructional information
- examples of Australian teachers applying these technologies
- links to online communities for advice and help
- tools to guide and design innovative learning experiences for students
  Link to the resource

Google Chromebooks

Recently, Google Chromebooks were added to the DoE procurement contract and two specific models are available now for purchase by schools. While Chromebooks are a desirable mobile device for use with students and staff, work is now underway on making Chromebooks compatible with the DoE Google Apps for Education user accounts accessed via our Portals.

Until this work is finalised, the devices can only be used with a personal Google account.

Tell your technology story with ClassMovies!

Recent research conducted by ITD confirmed the important role of peer experiences in helping schools make decisions about technology.

NSW Department of Education's ClassMovies initiative provides an easy way for schools to share and showcase their innovative use of technology in the classroom and the wider school environment.

Mark Greentree, principal of Prestons Public School has been advocating the use of ClassMovies to other principals as a great way of sharing some of the best practice that is occurring in their school.

He recently told *Technology News for Schools,* "I strongly believe that principals will want to see these 'stories' as it will give them entry point ideas to get things rolling at their school".

The Department's partnership with ClassMovies allows NSW public schools to create short videos of their teaching practices and school programs.

Click Play below to watch this video

Raw footage captured by the schools is professionally edited to bring the school's story to life in the best possible way.

Technology is one of **eight focus areas** for ClassMovies in 2015. This means that schools are able to make a short documentary demonstrating their teaching and learning in the area of technology at no cost to the school. Normally the cost to schools of making a ClassMovie is $834 plus GST.

- Visit the **ClassMovies portal** for more information on how Class Movies works

- Jump in to **ClassMovies TV** to watch movies already made by schools across NSW

- If you are interested in making a technology movie, contact Allan Booth via email at: **allan.booth@det.nsw.edu.au**

Learning in the Cloud at Erina High School

Erina High School's 2014 Class-Movie, *'Learning in the Cloud'* showcases how a shared vision, effective leadership and focused teamwork resulted in an innovative and modern learning environment for Erina students using **Google Apps for Education**.

Head Teacher, Brendan Jones, worked with editor, James Blannin-Ferguson, to make the 5 minute movie which includes interviews with staff and students at the school. The movie not only showcases the benefits of Erina's approach, but also provides valuable insight on working to overcome challenges associated with implementing new technology at the school.

Brendan said that the school had found the process of making the movie, *"excellent and very easy"*. He was surprised to find that all they needed to do was shoot footage, submit it in raw form and then provide feedback on the rough cut of the film. His reaction to seeing the first cut was, *"It was like they had read our minds!".*

The school has since shown the movie at parent information nights and shared it on the school's Facebook page. Feedback from the school community has been extremely positive.

Internet traffic management

As reported in the Impacts on the DEC Wide Area Network information pack released in June, our IT Performance Team have identified that unmanaged Windows computers and loosely-managed or unmanaged iPads are the cause of a large proportion of our daily traffic. This is especially the case since the end of DER and the implementation of BYOD in many schools.

These devices are by default set to "pull" updates for the operating system. As the amount of these devices on our network grows, the **update traffic is magnified greatly**. Not only are individual school gateways being flooded, but the department's Internet gateway is becoming severely impacted in school hours, **affecting everyone**.

How big is the problem?

Because these updates are sourced directly from the host Microsoft and Apple websites, each unmanaged device is directly requesting its own copy of each update. If there are 100 unmanaged devices at a school, 100 copies of each update are being downloaded through our internet gateway.

In early July, a centralised caching system was installed to better manage this Update traffic and now 74% of all requests from unmanaged devices for updates are delivered from the cache, rather than from the Internet. While this has helped to free up our shared gateway to the Internet, local school gateways continue to be flooded.

Blocking Updates during school hours

With the approval of the PPA and the SPC, it has been determined that actively blocking access to system updates **during school hours (9:00am-3:00pm)** will relieve pressures on local WAN links without impacting on the regular use of these devices. A trial of these blocks at 19 schools in July delivered **an increase in teaching and learning content** through better access. These blocks will be activated from August 31 for all schools.

Blocking Updates Fact Sheet

To further explain the blocking of updates during school hours, a Fact Sheet has been produced and is **available here**.

Distributed Denial of Service attacks

A denial-of-service (DoS) attack is typically an attempt by people to prevent legitimate users of a service from using that service. There are two general forms of DoS attacks: those that crash services and those that flood services.

The most serious attacks are "distributed", where hundreds or thousands of controlled computers (*a "botnet"*) simultaneously make requests of an online service, flooding it.

In recent months, the department has been the target of DoS attacks which have caused performance issues. We continue to work with our vendor partners to actively monitor for and block denial of service attacks and maintain service uptime levels.

Free Digital Licence for Year 6 students

The **eSmart Digital Licence** program is an online challenge combining quizzes, videos and games, designed to prepare Australian children (aged 10 and over) to be smart, safe and responsible digital citizens.

Children will complete eight learning modules that evaluate their comprehension of key technology and cyber safety topics, and equip them with the knowledge and skills they require to learn, play and socialise online.

Getting an eSmart Digital Licence is a fun and rewarding challenge to be taken at home, in the classroom or at the library. **If you teach Year 6**, your students are eligible for a free **Digital Licence courtesy of Google**, in partnership with The Alannah and Madeline Foundation in 2015.

Find out more information about the **eSmart Digital Licence** and enrol your year 6 classes for free by visiting **this website** today.

Office 365 ProPlus
Free for staff use at home!

For the past two years, DoE employees have been able to order MS Office 2013 for personal use on one computer at home. With the release of **Office 365 ProPlus**, staff can now download their own copy and **install it on up to 15 personal devices** including up to five Windows desktop PCs, laptops or Apple Macs. Just sign in at home to Office 365 **via your Staff Portal** (on the Learning Tools tab) and then click **Install Now**.

Local apps for Office 365 are also available for **iPads, Android tablets** and smart phones from the respective app store.

NOTE: The home-use licence only applies to current DoE employees.

MS Office 2013

Plans to roll out the upgrade to MS Office 2013 in eT4L schools and corporate offices have been postponed to term 4. Further information will be provided in next term's issue of this newsletter.

Understanding eT4L Services

As eT4L Services continues to roll into secondary schools, a new infographic has been published to highlight the many benefits that migrating your school will bring.

As the eT4L Primary School infrastructure is upgraded, it will be brought into line with the secondary school offering. Download the Understanding eT4L Services poster **here**.

MS Office 365 Sway released!

Sway is the brand new tool in your MS Office 365 online suite in the DoE Portal. It's available for all staff and students right now!

With Sway, you can easily create engaging, eye-catching interactive reports, presentations, and more which flow neatly across all desktops, tablets and smartphones.

Teachers can use Sway to engage students, faculty and parents with interactive lessons, assignments, project recaps, newsletters and more. **Students can have fun while learning** and stay engaged by using Sway to breathe new life into reports, assignments, projects, study materials, and portfolios.

Aruba WiFi in secondary schools

In 2009 as part of the Digital Education Revolution (DER) program, all secondary schools in NSW received Aruba WiFi infrastructure in all learning spaces to cater for the introduction of DER laptops for all students in year 9.

The supplied controller-based solution with Aruba 125 wireless access points (WAPs) allowed for a reliable, managed mobile-access solution that catered for roaming devices and was scalable as numbers of DER laptops increased throughout the five years that the program ran in NSW schools.

While technology continues to change, these model Aruba controller and WAPs are technically end-of-life, but are still functional and operating well. To continue the longevity of our WiFi fleet, ITD has maintained a pool of controller and WAPs in our warehouse that can be used as swapouts should any of these parts fail in your school. Simply log an ICT service desk call to instigate the swapout process.

What this pool does not allow for however, is the extension of a school's existing Wireless LAN. Compatible WAPs are no longer available for purchase from Aruba, so ITD is currently investigating several alternative solutions that will enable those schools considering upgrading and/or extending their WiFi network. More information about WiFi upgrade options will be provided to all secondary schools once complete.

Webmail 2013

The start of term 3 brought changes for many staff with the upgrade of the corporate email system for schools from Exchange 2007 to 2013. With 180,000 accounts migrated, challenges were expected and our ICT Service Desk handled the calls for support well. With the majority of issues now resolved, staff are starting to see the many benefits that the new email service offers.

Many Quick Reference Guides remain **available on our intranet site** to further familiarise staff with these changes.