



IT Services Performance Report

January – December 2011

Prepared by: UCD IT Services

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Seamus Shaw
Chief Technology Officer

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Background

We have a series of measures in place to monitor IT performance and service availability, in order to provide feedback on the value of investment and to quantify the improvements in levels of service. The first full year of statistics was published in January 2004. This report is our eighth full year and contains 2011 results and key comparisons with previous years.

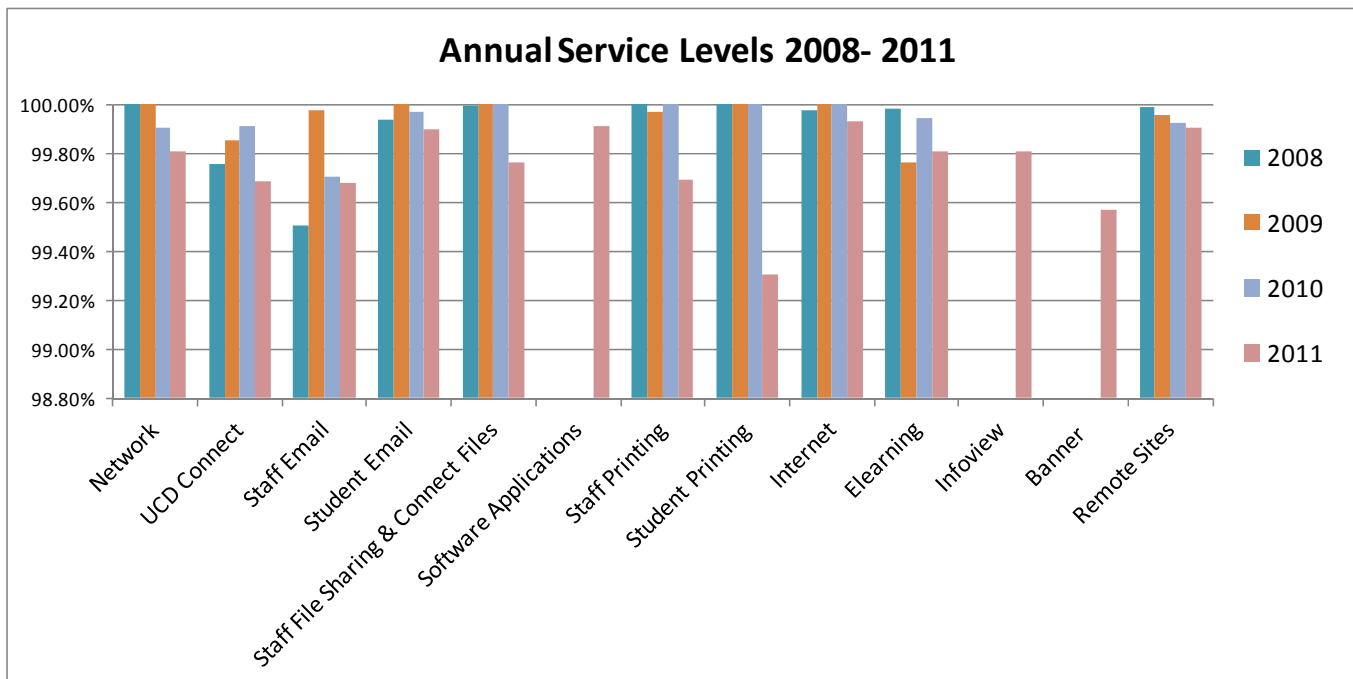
The IT plan sets targets for availability of services to be achieved over the period of investment. These targets are based on standard industry measures of IT services i.e. “uptime” of any given service within its operational window. A set of 13 distinct IT services were measured on a weekly basis in 2011. Any failure in a service is logged and the time interval to full recovery is recorded. The “% availability” of the service is then measured over a 12 hour daily window (9am to 9pm), over a 5 day working week.

For the purposes of this report we have compared the 2011 statistics to the yearly statistics dating back to 2008. In 2011, we broke out the Admin Systems category into the two major campus wide admin systems of Banner and InfoView and added the new service of Software Applications (Software for U) into the performance reporting model.

Annual Service Levels 2008 and onwards

The graph below shows the comparison from 2008 onwards over the full year.

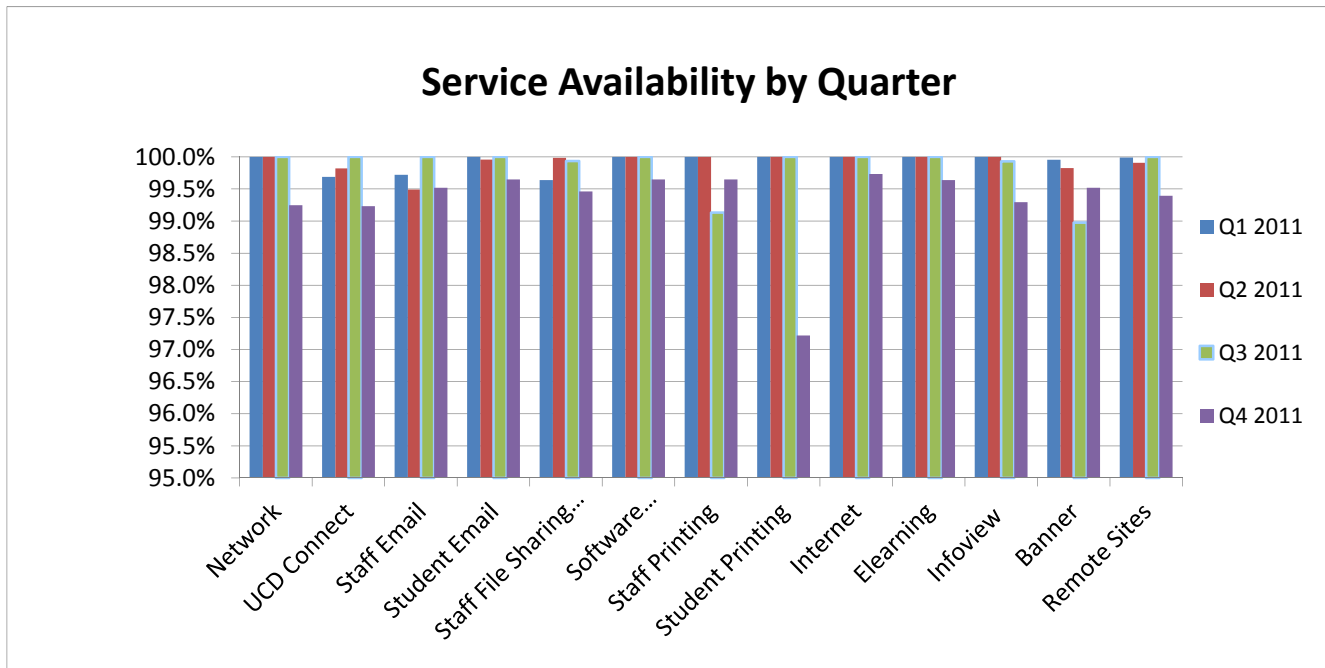
(Software Applications, Banner, and InfoView are new headings added in the year 2011).



Quarterly Service Availability

The graph below shows the quarterly statistics for each service for 2011 and the average availability level. The target for service availability is 99.5%. During 2011 there were 7 breaches in total.

There were no service breaches during the first two quarters, two breaches occurred during the 3rd quarter – Banner and Staff Printing, and during the 4th quarter there were five breaches – InfoView, Network, UCD Connect, Student Printing and Remote Sites.



Summary of Quarterly Service Breaches

Banner: In August Banner experienced unusually high traffic accessing SISweb, resulting in a period of reduced performance.

Staff Printing: The service was impacted by a corrupted security certificate.

InfoView: The service experienced simultaneous issues with load balancer (infoview.ucd.ie) and Business Objects repository.

Network: There was a network outage that affected James Joyce Library, Newman Building and Arts Annex. This was caused by combined hardware and software failure.

UCD Connect: This service was unavailable as a result of a backup process taking longer than normal.

Student printing: This service was impacted due to a problem with a scheduled upgrade.

Remote Sites: (Data only collected for last two quarters). The connectivity between Belfield and St Vincent's Hospital was impacted due to a software failure on a network device. Connectivity to Crumlin Hospital was lost due to a 3rd party contractor making unauthorised network changes.

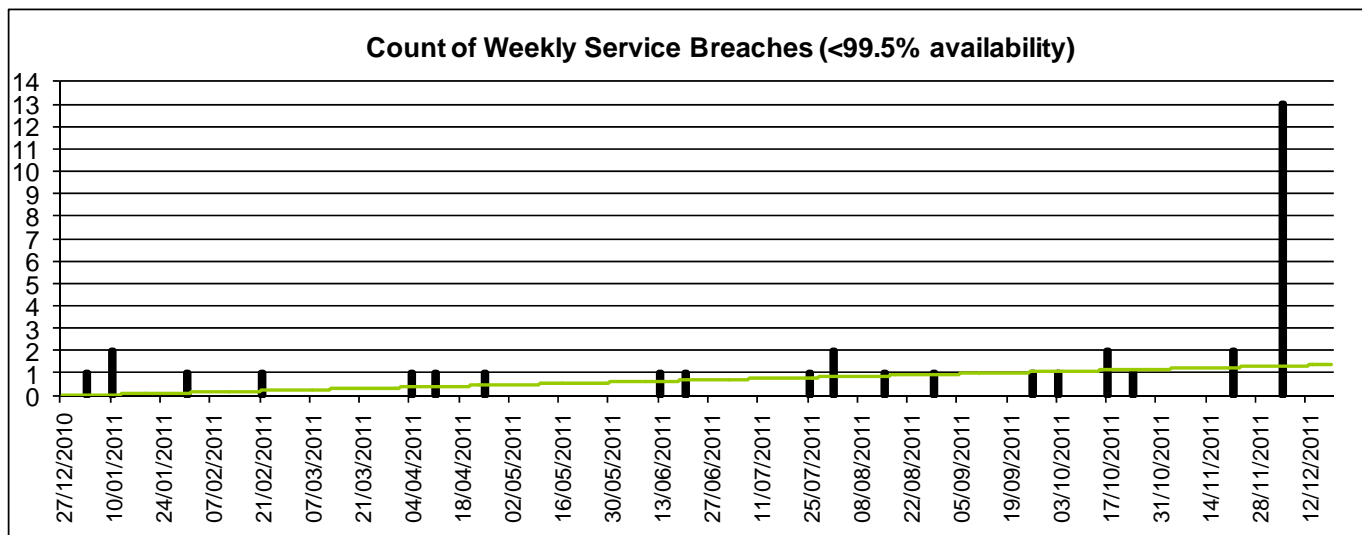
Disaster Recovery Plan

Our disaster recovery plan was put into action in December of 2011 as all services were impacted due to a fire in our primary data centre (Daedalus). All essential student services were restored within 2.5hrs, and all essential staff services within 4 hours of the event.

Frequency of Service Interruption

In addition to the monthly and quarterly availability measures, a count of service breaches on a weekly basis by service is also recorded i.e. any service which breached 99.5% availability in a given week contributed to the count.

This measure is used as an indicator of the frequency of interruption to services.



The total number of weekly service breaches for 2011 was 35

Yearly Comparison

	2011		2010		2009		2008	
	Number of breaches	Total duration (Mins)	Number of breaches	Total duration (Mins)	Number of breaches	Total duration (Mins)	Number of breaches	Total duration (Mins)
Network	2	353	4	170	0	0	0	0
UCD Connect	4	532	4	178	4	273	1	440
Staff Email	5	594	5	633	1	45	5	700
Student Email	2	185	1	48	0	0	2	110
Staff File Sharing	3	457	0	0	0	0	0	0
Software Applications	1	165	-	-	-	-	-	-
Staff Printing	2	490	0	0	2	49	0	0
Student Printing	3	1302	0	0	0	0	0	0
Internet	1	125	0	0	0	0	1	10
Elearning	1	170	3	98	2	420	0	0
Infoview	3	356	-	-	-	-	-	-
Banner	5	792	-	-	-	-	-	-
Remote Sites	3	324	1	84	1	82	0	0
Admin Systems	-	-	6	935	0	0	2	89
Total	35	5845	24	2146	10	869	11	1349

The comparison with 2010 shows downtime increased by 3,699 minutes and the number of breaches increased by 11. The Data Centre fire in December accounted for over half the number of minutes and a third of the number of breaches. In addition, a student printing outage caused by the data centre fire, took a number of days to restore service and problems with Banner during registration caused a number of breaches also.

Overall Trends

General	Increase in service breaches and downtime in 2011 over previous year.
Network:	One Service Level breach Services breach due to hardware and software failures
UCD Connect:	One Service Level breach This breach was caused by the Data Centre fire
Staff Email:	Service Level met for all Quarters
Student Email:	Service Level met for all Quarters
Staff File Sharing:	Service Level met for all Quarters
Software Applications:	Service Level met for all Quarters
Staff Printing:	One Service Level breach This breach caused by a software failure
Student Printing:	One Service Level breach This breach was caused by the delays in restoring service after the Data Centre fire
Internet:	Service Level met for all Quarters
eLearning:	Service Level met for all Quarters
InfoView:	One Service Level breach Software configuration issues
Banner:	One Service Level breach Performance issues
Remote Sites:	One Service Level breach This breach caused by the Data Centre fire

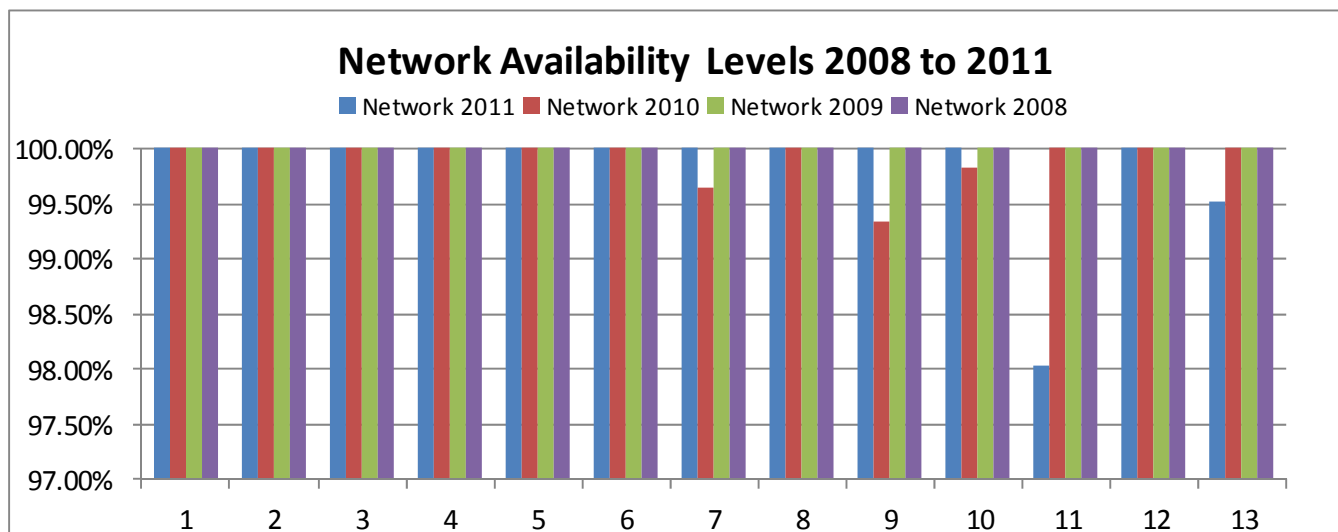
Annual Network Availability

Network availability is one of the most significant factors in overall service performance. It measures the availability of the network between all buildings on the Belfield campus.

Total Annual Network Downtime: 1323 Minutes in 2004
 1075 minutes in 2005
 256 minutes in 2006
 0 Minutes in 2007
 0 Minutes in 2008
 0 Minutes in 2009
 170 Minutes in 2010
 353 Minutes in 2011

The annual availability level for 2011 was **99.81%**.

The graph below shows the monthly availability comparison for 2008 onwards.



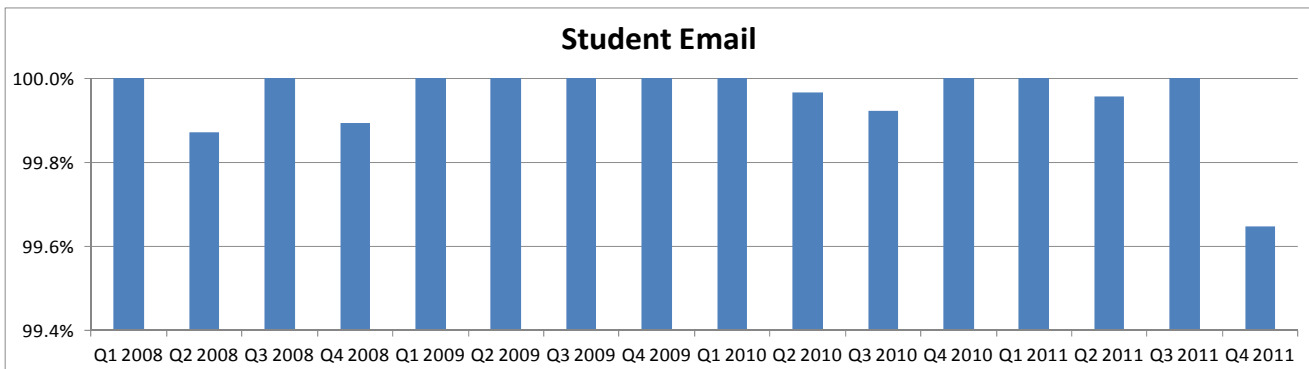
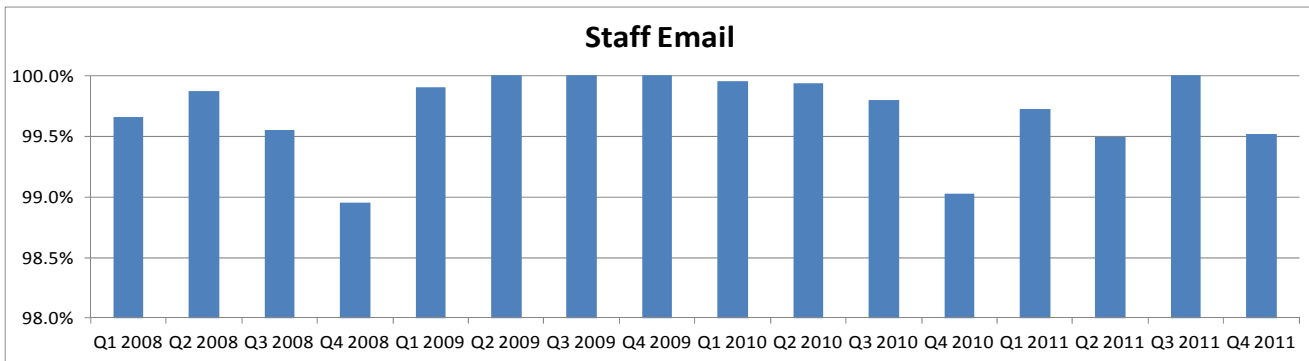
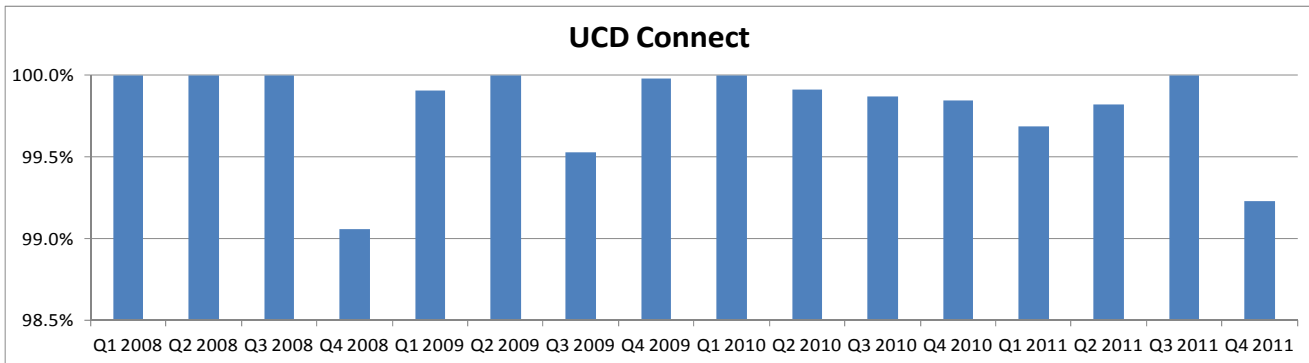
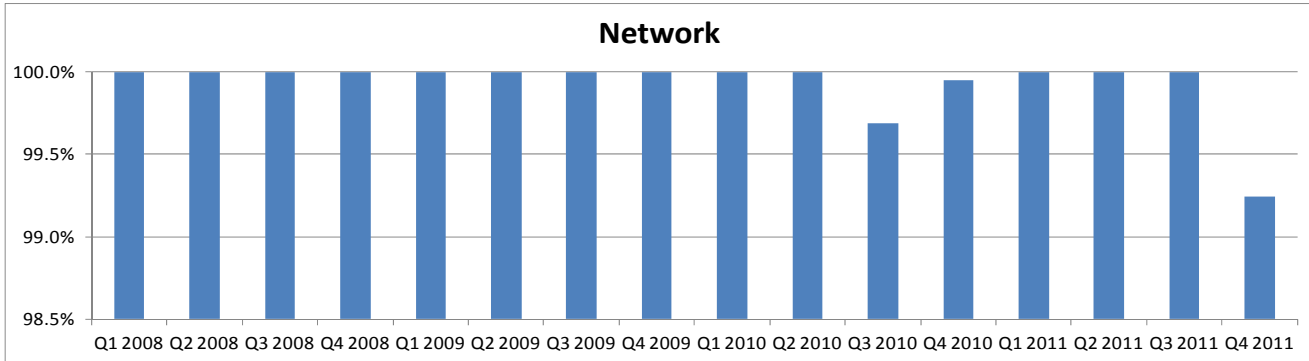
Annual Remote Site Network Availability

The table below lists the different campus locations and their network connections.

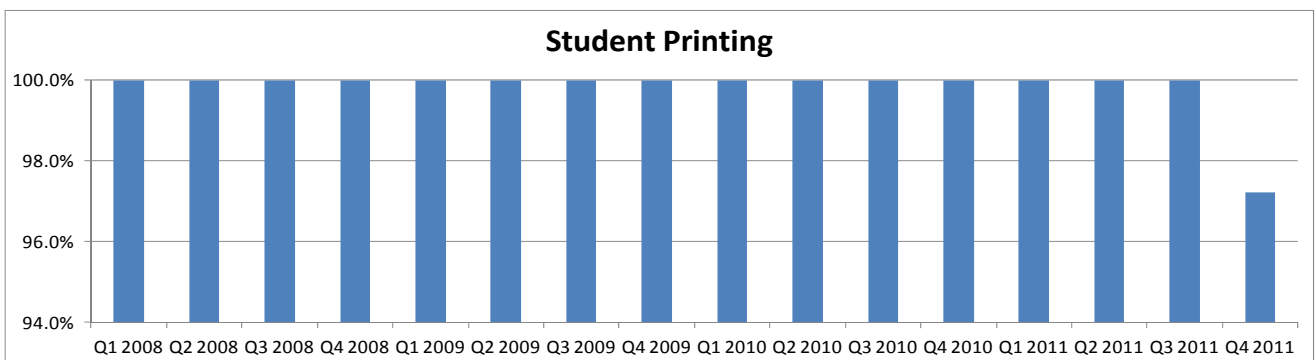
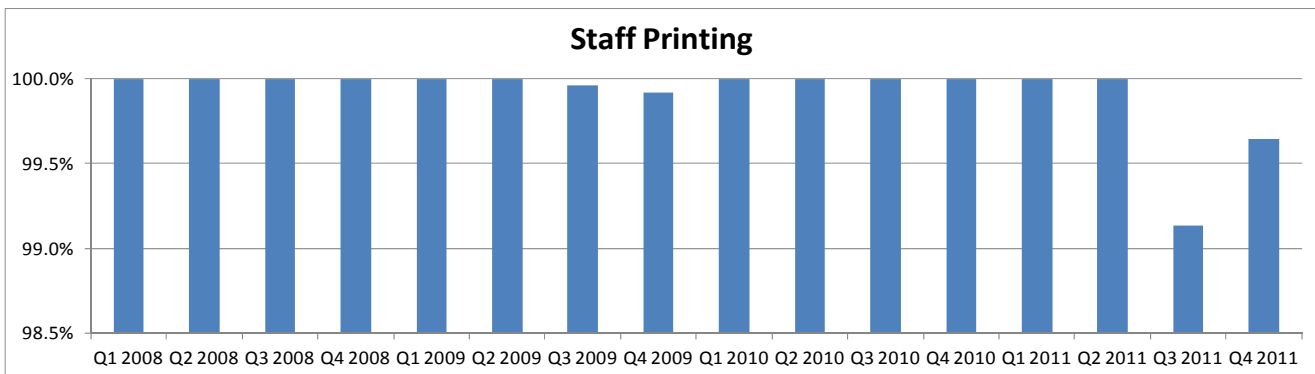
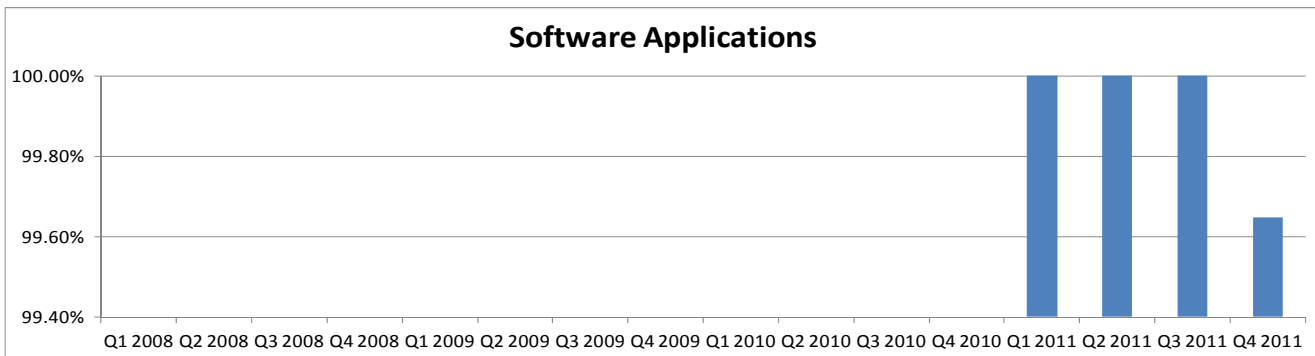
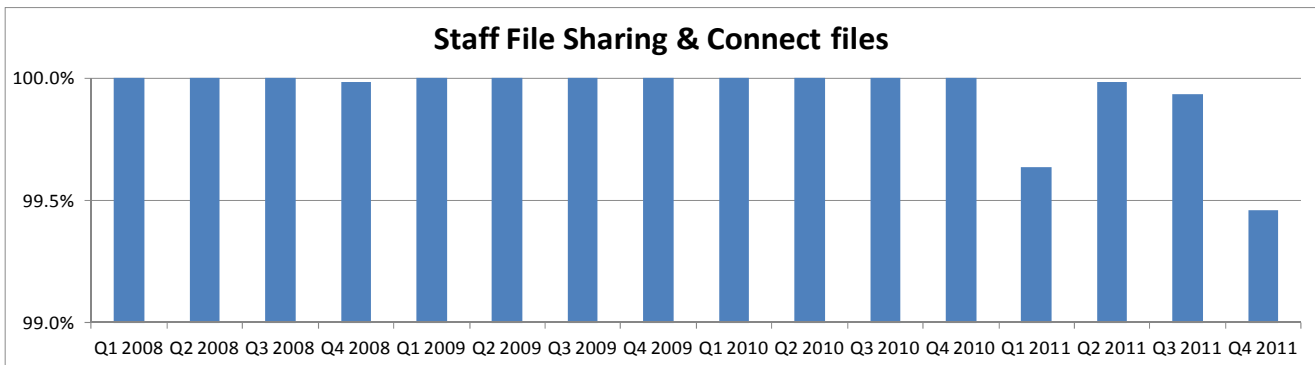
Campus	Connection Type	Comments
Belfield	MAN	99.976% availability for 2011
Blackrock	MAN	99.980% availability for 2011
St Vincent's Hospital	MAN	99.980% availability for 2011
Mater Hospital	MAN	99.997% availability for 2011
Crumlin Hospital	MAN	99.992% availability for 2011
Lyons Estate	MAN	99.995% availability for 2011

Individual Quarterly Service Availability – 2008-2011

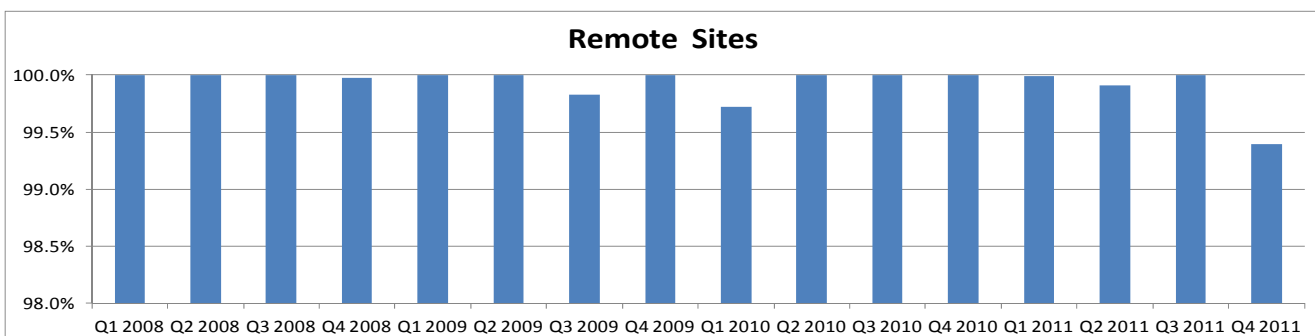
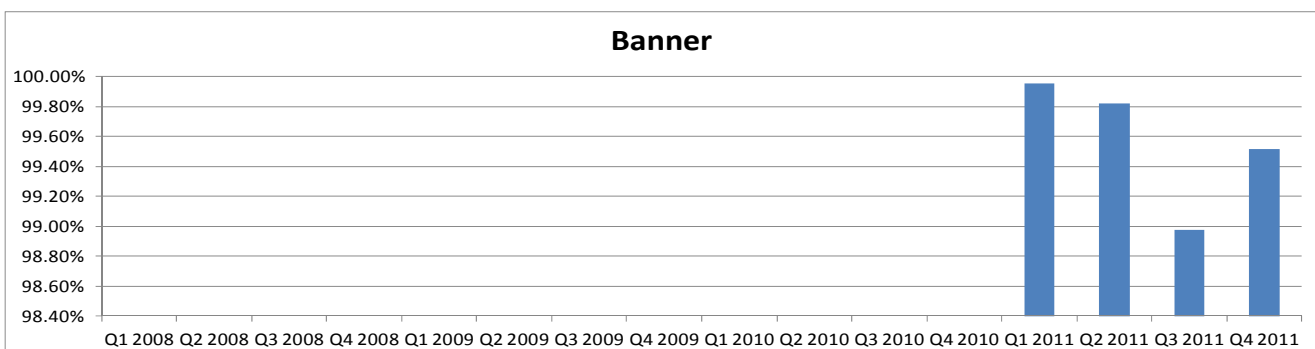
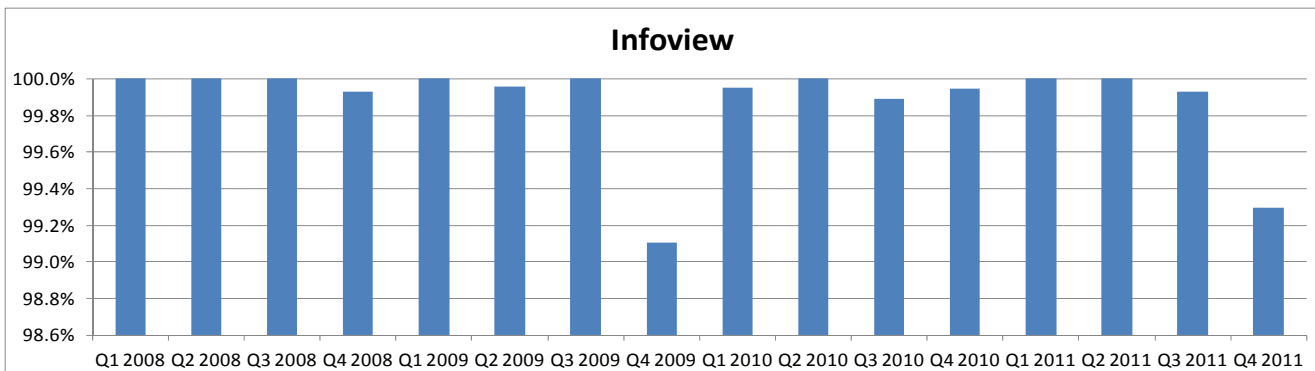
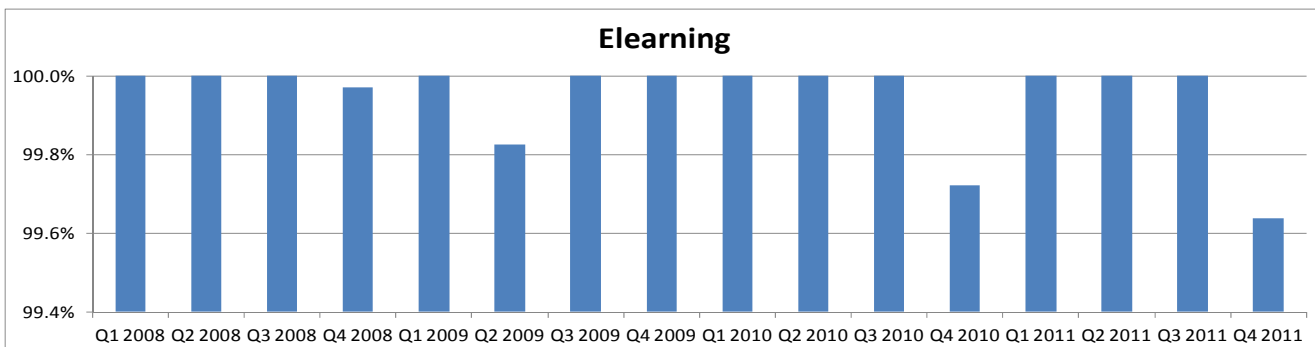
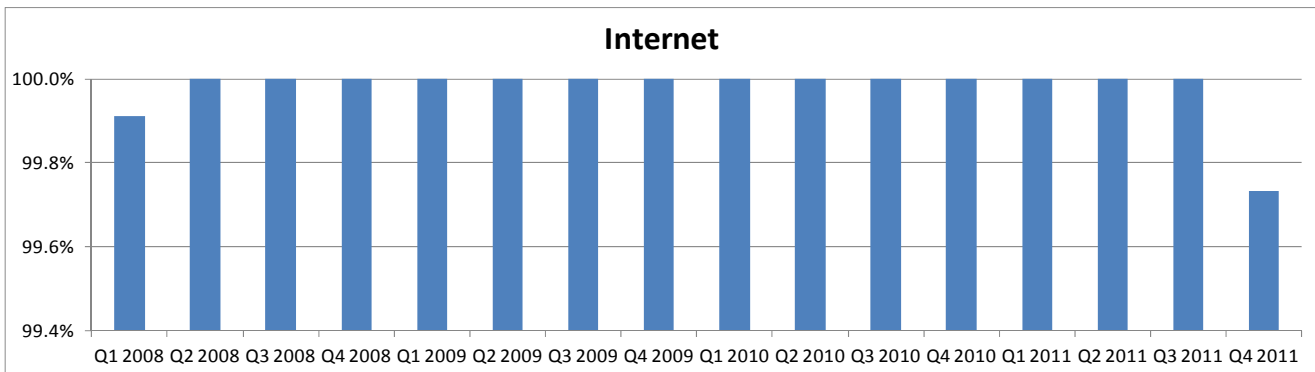
Detailed history for 2011 together with quarterly comparisons over the four year period 2008 to 2011 are provided on the following pages.



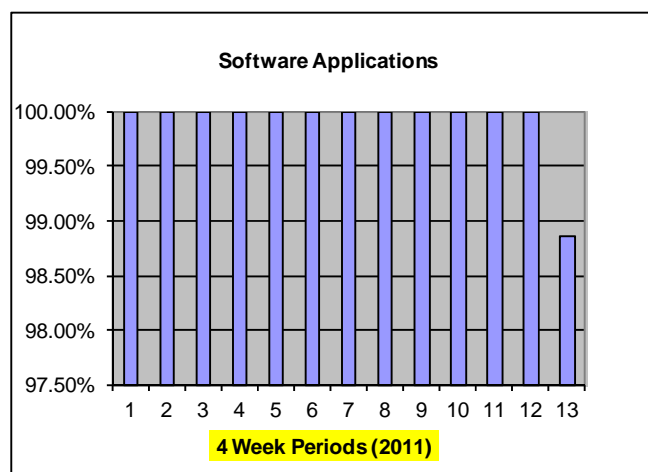
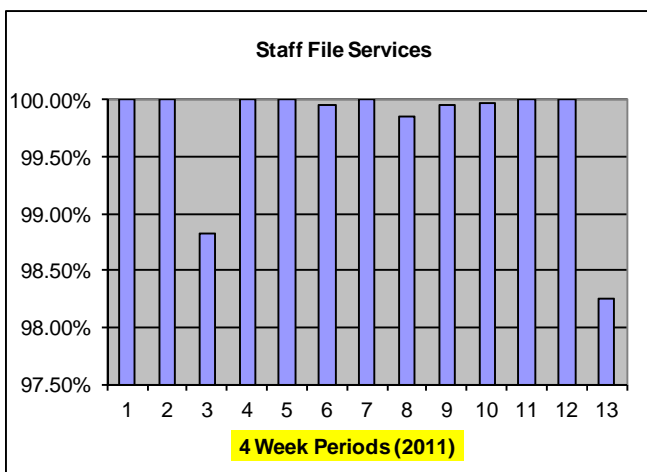
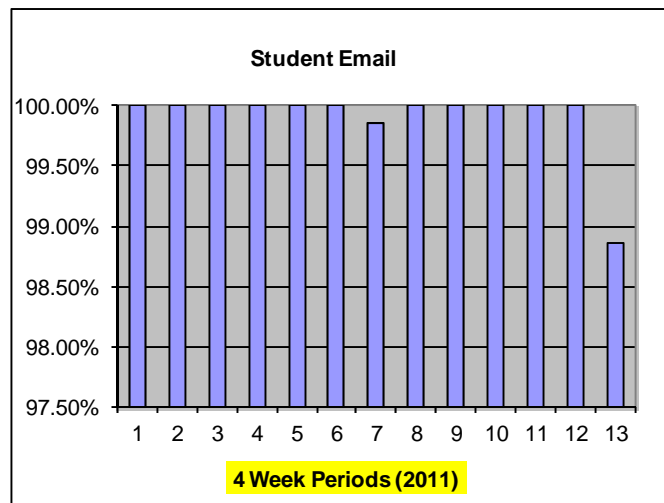
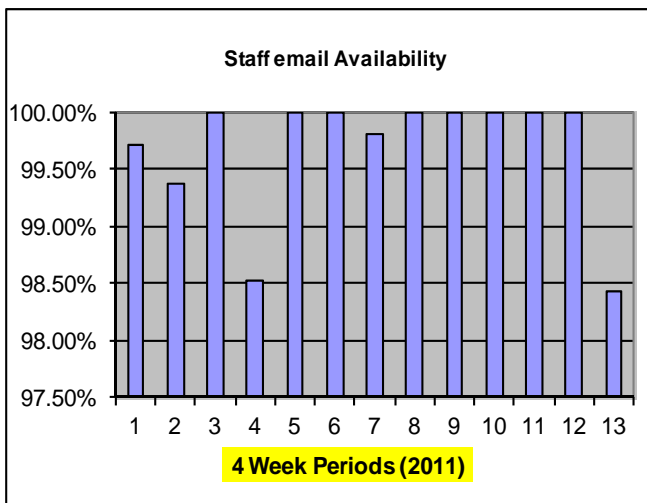
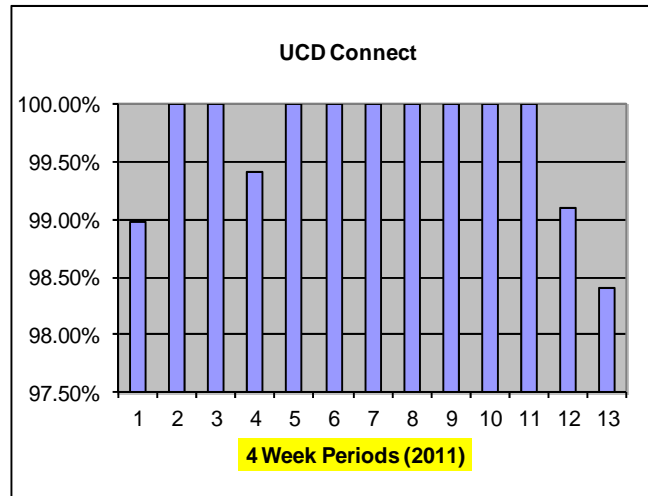
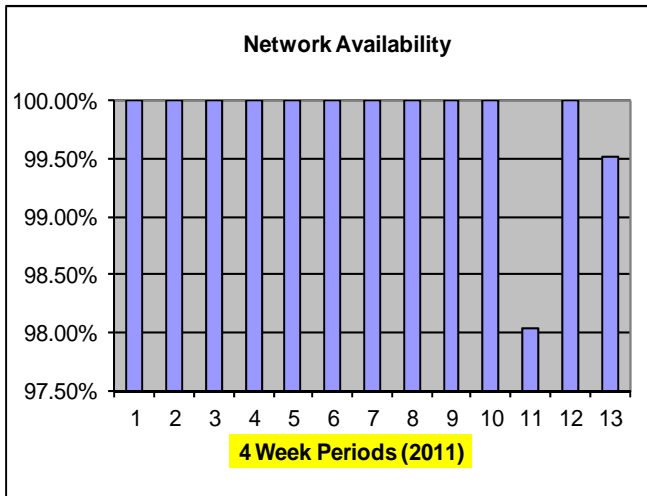
Individual Quarterly Service Availability – 2008-2011 (cont.)



Individual Quarterly Service Availability – 2008-2011 (cont.)



Individual 4 Week Period Service Availability – 2011



Individual 4 Week Period Service Availability – 2011 (cont.)

