

QUT Telephone Number Upgrade Project (TNUP)

Presented by:

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Queensland University of Technology

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Agenda

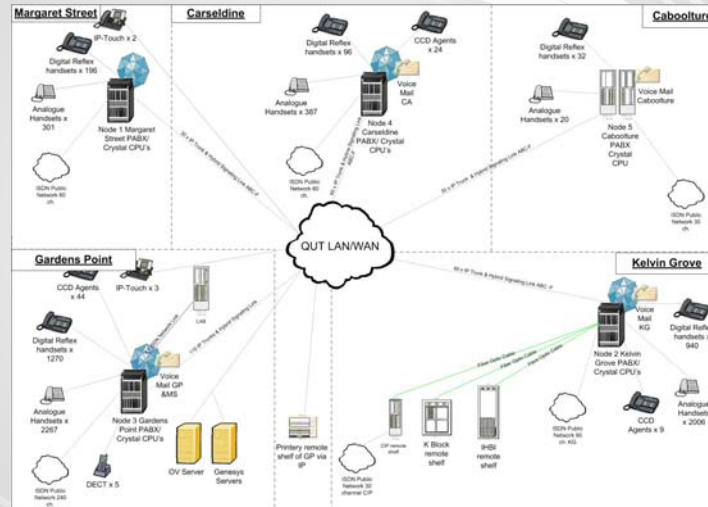
- Overview of QUT's PABX network
- Telephone Number Upgrade Project?
- Process Used
- Lessons Learnt
- Technical Solution
- Questions



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QUT PABX Network Overview



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Telephone Number Upgrade Project: “Impetus to Change”

- University from 1990 had acquired 7,200 numbers in the ‘3864’ range
- No more available from Telstra in this range!

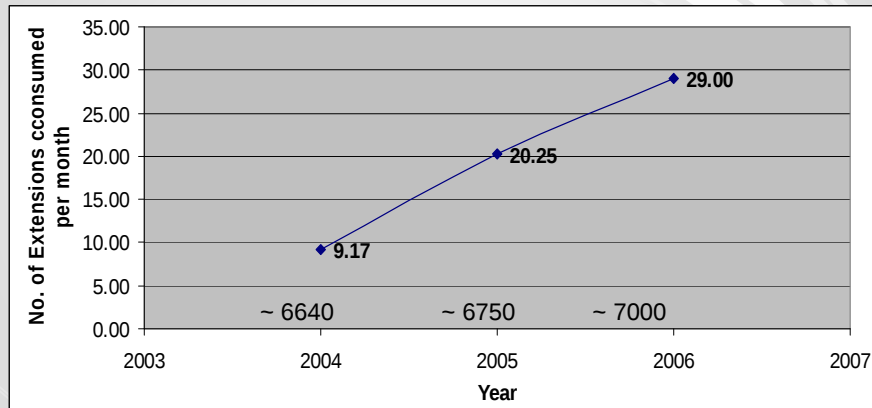


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Primary Business Drivers

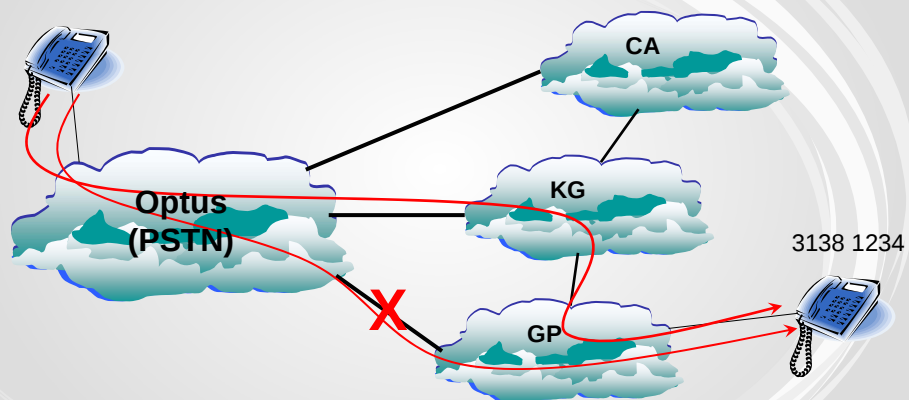
- QUT was running out of Telephone numbers



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Business Drivers - Improve Redundancy and Resiliency



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Business Drivers- Improve client service by utilising 1300 & 1800 numbers

- One number that doesn't change
- Local or free calls for clients
- Statistics
- Added redundancy



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Process Utilised

- Phase 1: Investigation Phase (3 months)
 - Commenced early 2006
 - Investigate current & future business requirements
 - Investigate options for short term concerns
 - Provide Recommendations
- Phase 2: Implementation Phase (3 months)
 - Late 2006



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Proposed Solution?

- Elected to partner with our PABX maintainer to develop and implement a solution
- Migration from Telstra to Optus
 - Migrate to a new 10 000 number range with Optus
 - Change all extensions, in all QUT databases over a weekend from 4 to 5 digits



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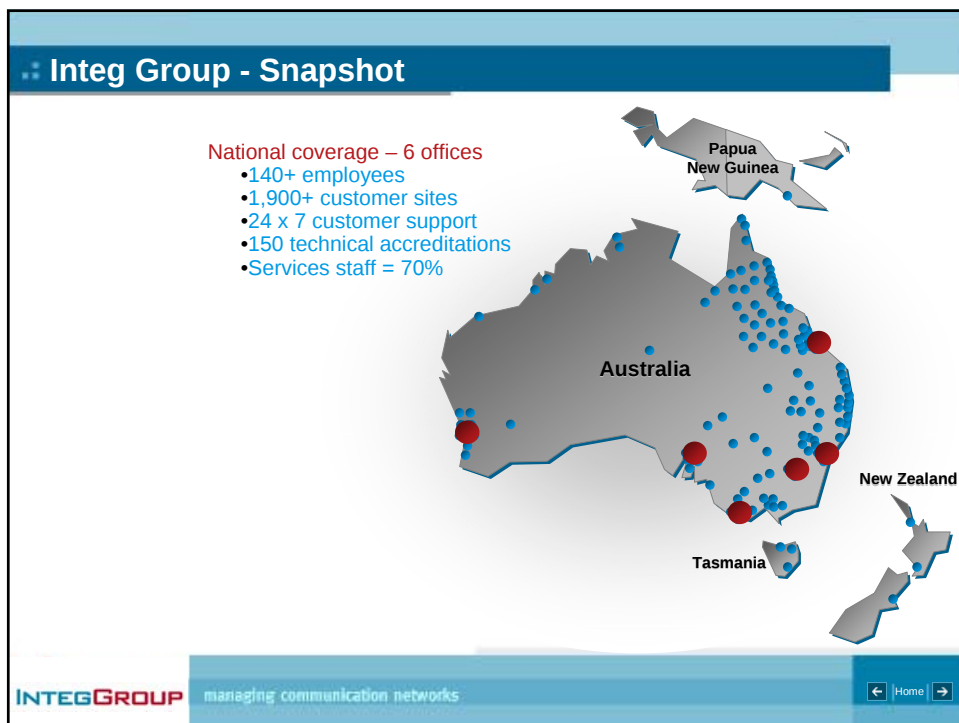
TNUP: Major Success Contributors

1. Comprehensive project planning and documentation.
'Near enough is good enough' is a sure recipe for disaster in today's complex integrated network environments
2. Test EVERYTHING – leave nothing to chance
3. The right people involved
4. Communication, Communication, Communication

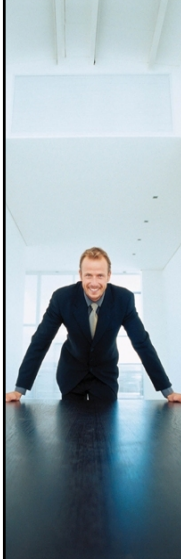


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Supporting more than:



Integ is an Australian integrator of enterprise voice, data, IP communication and contact centre solutions.

185,000 voice extensions

Multi vendor

1,900 customer sites

Main focus Australia and New Zealand

Some global sites

10,000 data & security appliances

Multi vendor

3,000 contact centre seats

Simple / Complex / Large / Small



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QUT –TNUP Scope



- Approximately 7500 Extensions
- 6 nodes/campuses
- 60 seat Genesys Call Centre
- Approximately 19,000 data fields containing ext. Numbers
- Sophisticated Call Accounting and Billing reports
- Comprehensive Company Directory



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QUT – TNUP Challenges



- large scale operation / multiple sites
- minimum user disruption
- big bang cutover
- old and new national numbers active simultaneously
- distributed Genesys Call Centre across sites
- Peripheral databases synchronized on day one
- 99 % project success mandatory



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QUT – TNUP Approach



- Replicated QUT network in INTEG lab
- Replicated QUT peripheral databases and CC in lab
- Converting PABX configuration database
- Converted peripheral databases and synchronised with PABX
- Adjusted Genesys CC with new extensions and pilots
- Extensive testing in the lab
- Adjusted work processes
- Converted a second time with change freeze on site



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QUT – TNUP Implementation



- ready tested databases loaded on live CPU's
- remain redundant CPU as back out plan
- re-synchronised PABX with peripheral databases
- converted Voice Mail database to 5 –digit
- adjusted Genesys CC to new 5-digit number scheme
- Test according to test plan

Project was 100 % success



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QUT – TNUP Lessons Learnt



- Voice networks of the future are integrated complex IT – systems
- the "soft PABX" is a critical component in an IT environment
- Don't change one element of this environment without consciously considering all the adjacent integrated environments
- The stand alone PABX is a matter of the past



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QUT – TNUP Lessons Learnt (cont')



Future Voice Network projects require:

- Synchronisation and dependencies of software revisions between systems
- Implementation and rollout strategies (eg. desktop clients)
- Recovery and back out strategies are no longer limited to a single system



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QUT – TNUP future strategies for similar projects



- More sophisticated strategies for:
- Testing methodologies
- Migration
- Change control
- Configuration management
- As result far more sophistication in project frameworks

TNUP encompassed many of these considerations.



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QUT – TNUP: Post Cutover Incident Summary



Summary of Post Cutover Incidents

There were 23 incidents in total relating to the TNUP following weekend of the cutover. Of those 23 incidents:

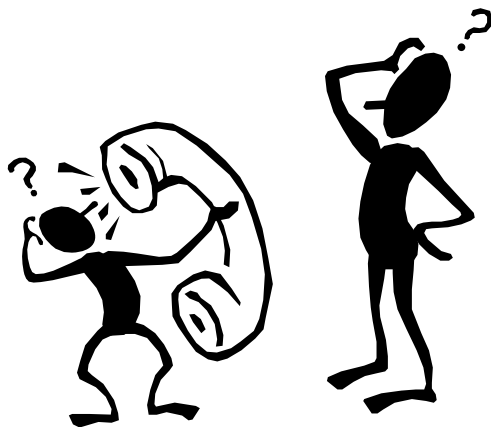
- 4 handsets had their access levels changed, such as not being able to dial STD or mobile numbers
- 4 incidents were people who were not able to be contacted by people external to the University
- 3 handsets where there were issues with their personal programming
- 3 handsets not working
- 9 miscellaneous incidents



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QUESTIONS?

A graphic from QUT showing a hand holding a sign. The sign has 'NEW EXTENSION' at the top, '3138 2000' in the middle, and 'CURRENT EXTENSION' at the bottom. Below the sign, it says 'From October 16' and lists two bullet points: '5 digit extension' and '3138 prefix replaces 3864'. At the bottom, it says 'For exceptions and more information visit: <http://5digit.qut.edu.au>'.

<http://5digit.qut.edu.au>



<http://www.integ.net.au/>



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