

# Schedule of Services

## Australian Digital Futures Institute (ADFI)

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| <b>Document Purpose</b>     | <p><b>Description of Services</b></p> <p>This schedule of services covers:</p> <ul style="list-style-type: none"> <li>• Support for the staff desktop and notebook computing environments</li> <li>• Support for ADFI servers</li> <li>• Baseline configurations and supported software</li> <li>• Variations to USQ Core Desktop SLA (if appropriate)</li> <li>• ADFI Infrastructure Provisioning</li> </ul>                             |   |                          |  |
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| <b>Error Advisory</b>       | <p>To the Reader:</p> <p>If you encounter any inaccuracies or printing faults in this document please contact the Owner (see Document Information section, above) as soon as possible. The Owner will then initiate the required modifications.</p> <p>If you are unable to contact the Owner, contact that person's Manager or Supervisor.</p> <p>Thank you for helping the Division of ICT Services maintain quality documentation.</p> |   |                          |  |

# Schedule of Services

## Australian Digital Futures Institute (ADFI)

|   |   |
|---|---|
| <b>Server Hosting, Maintenance and Administration Services Provided to ADFI</b> | Support for ADFI servers which comprises: <ul style="list-style-type: none"> <li>• Backups and secure storage.</li> <li>• Disaster recovery planning and documentation.</li> <li>• Equipment recommendations</li> <li>• Purchasing of server equipment.</li> <li>• Organisation and co-ordination of server equipment maintenance contracts.</li> <li>• Provisioning of new RedHat and Windows virtual servers.</li> <li>• Installation of operating system distribution packages.</li> <li>• LDAP-based user access to servers.</li> <li>• Administration of server sudo configuration.</li> <li>• Technical advice on development and maintenance of the networks, desktop computers, printers, software, etc.</li> <li>• Hosting of ADFI servers in the ICT data centre.</li> <li>• Patching and maintenance of the VMWare ESX host environment.</li> </ul>  |
| <b>Desktop Support</b>  | <ul style="list-style-type: none"> <li>• Desktop Support Services will be provided as per the <a href="#">USQ Core Desktop SLA</a></li> </ul>   |
| <b>Downtime Notifications</b>   | <ul style="list-style-type: none"> <li>• If a server or network requires immediate attention, the ADFI Client Contact will be advised by phone.</li> <li>• If a server is required to be taken down for scheduled maintenance during normal working hours, ADFI users will be advised by email at least 48 hours prior to the maintenance date/time.</li> </ul>   |
| <b>System Backup</b>  | <ul style="list-style-type: none"> <li>• ICT will undertake to ensure that all ADFI servers are adequately backed-up, and can be recovered in the event of a system failure.</li> <li>• All back-up tapes will be stored off-site or within a fire-proof safe within the University of Southern Queensland.</li> <li>• In the event of a system failure which results in the loss of all or part of ADFI data, ICT will endeavour to recover data up until the last incremental or full system back-up within 48 hours.</li> <li>• ICT cannot recover information entered after the last incremental or full system back-up where a failure occurs before the next scheduled back-up. As such it is recommended that hard copies of all data entered be maintained for at least 24 hours to ensure total system recovery.</li> <li>• Specifically, the backup schedule will consist of daily incremental, weekly full and 3 months of monthly backups.</li> </ul> |
| <b>Disaster Recovery</b>  | Disaster recovery planning for facilities and equipment is the joint responsibility of ADFI and the Division of ICT Services.   |
| <b>ADFI Support Availability</b>  | These services will be provided Monday through Friday between the hours of 8:00am and 5:00pm. Support can be provided outside of these hours if prior notice is given to the Operations Manager (Infrastructure & Systems) a minimum of 72 hrs in advance. The cost for any out-of-hours support will be paid by ADFI.  |
| <b>Client Contact</b>   | <ul style="list-style-type: none"> <li>• Duncan Dickinson</li> <li>• Bronwyn Chandler</li> </ul>  |

**Division of ICT Schedule of Services Agreement**

|                                     |  |
|-------------------------------------|--|
| <p><b>Service Contacts</b></p>      | <ul style="list-style-type: none"> <li>• ICT Service Desk 4631 1900 (Ext 1900)</li> <li>• Service Delivery Co-ordinator, Chris White 4631 1820 (Ext 1820)</li> <li>• Relationship Manager/Manager Systems Administration, Jayish Lal 4631 2923 (Ext 2923)</li> <li>• Operations Manager (Infrastructure &amp; Systems), Monty Kambaran, 4631 2477 (Ext 2477)</li> <li>• Principal Manager Service Delivery, Maggie Fryer, 4631 2478 (Ext 2478)</li> </ul>  |
| <p><b>ADFI Responsibilities</b></p> | <ul style="list-style-type: none"> <li>• ADFI staff will follow ICT Change procedures and contact the ICT Service Desk to initiate a Request for Change</li> <li>• It will be the responsibility of ADFI to liaise with ICT to ensure;             <ul style="list-style-type: none"> <li>○ that the hardware is covered by suitable maintenance agreements with appropriate timelines for hardware fault resolution, and</li> <li>○ that the application software and software licences agreements are available to facilitate the resolution of any faults and the reinstallation of software</li> </ul> </li> </ul>   |
| <p><b>Time Frames</b></p>           | <p>ICT will undertake the tasks listed below within the defined time-frames. Where this will not be possible, the requesting ADFI staff member will be advised if a defined timeframe cannot be met.</p> <ul style="list-style-type: none"> <li>• Commissioning of a new RedHat or Windows virtual server on ADFI Virtual Infrastructure – within 4 working days</li> <li>• Commissioning of a new Ubuntu or bare virtual server on ADFI Virtual Infrastructure – within 3 working days</li> <li>• Installation of new packages – within 3 working days</li> <li>• Resource allocation (eg memory or storage) – within 3 working days</li> <li>• Root-level configuration changes (eg update sudoers) – within 12 hours</li> <li>• Firewall change requests – within 3 working days</li> </ul> <p>The above timeframes correspond to standard ICT change request timeframes, and reflect workload and prioritisation of requests. Actual timeframes for individual requests may be shorter depending on resource availability.</p> <p>Based on business priority timeframes for individual requests may be escalated and negotiated.</p> <p>ICT will endeavour to expedite the resolution of ADFI problems; however it cannot accept responsibility for delays caused by third parties</p> |
| <p><b>Commencement</b></p>          | <p>This Agreement commences as of 1 December 2010</p>  |
| <p><b>Review Process</b></p>        | <p>This Agreement will be reviewed annually in the quarter following the anniversary of the commencement date by the Service Provider and Service Receiver (for designated contacts, see below).</p>   |
| <p><b>Arbitration</b></p>           | <p>The Primary Arbitrator is: DVC (GLS)<br/>         In the absence of the Primary Arbitrator, the Secondary Arbitrator is: Chief Operating Officer</p>  |

**Division of ICT Schedule of Services Agreement**

| <b>Agreement Contacts</b> | Name             | Title  | Telephone | Initials |
|---------------------------|------------------|--|-----------|----------|
|                           | Sue Craig        | Executive Director DAIS                                    | 4631 2700 |          |
|                           | Duncan Dickinson | Systems Development Manager(ADFI)                          | 4631 1637 |          |
|                           | Monty Kambaran   | Operations Manager (Infrastructure & Systems               | 4631 2477 |          |
|                           | Jayish Lal       | Relationship Manager (ADFI)/Manager Systems Administration | 4631 2923 |          |
|                           | Chris White      | Service Delivery Co-ordinator                              | 4631 1820 |          |
|                           | Maggie Fryer     | Principal Manager Service Delivery                         | 4631 2478 |          |
|                           | Scott Sorley     | Interim Chief Technology Officer                           | 4631 2426 |          |

| <b>Accepted and Signed</b> |                                    | <b>Division of ICT Services</b>  | <b>ADFI</b>             |
|----------------------------|------------------------------------|----------------------------------|-------------------------|
|                            | Service Provider's Date Stamp Here |                                  |                         |
|                            |                                    | Signature                        | Signature               |
|                            | <b>Title</b>                       | Interim Chief Technology Officer | Executive Director DAIS |
| <b>Date</b>                |                                    |                                  |                         |

## Appendix A ADFI Infrastructure Provisioning

The ADFI technology environment, specifically the software development laboratory will comprise a compute pool of virtual and physical resources and associated network infrastructure to enable defined ADFI projects and initiatives to be undertaken.

ADFI server infrastructure (incorporating disk arrays) will physically reside within the USQ Data Centre environment. ADFI is required to consult with ICT regarding equipment specification and requirements to ensure that sufficient resources are available to host the infrastructure and align with USQ's investment and sustainability direction.

ADFI server infrastructure will be located in the "Non-USQ DMZ" providing network separation from USQ corporate infrastructure. The Non-USQ DMZ is intended for non ICT managed systems which may pose a higher than normal security exposure and require direct access to or from the Internet.

ADFI is expected to comply with relevant Information security standards and USQ policy.

Once a project or initiative is complete ADFI is encouraged to return the respective infrastructure resources to the resource pool where it will become available to future projects or initiatives. ICT will assist with transfer of data to a suitable media. Archival and retention of the respective project/initiative data at the time a project is deemed complete will be the responsibility of ADFI.

ICT reserves the right to deny network access until resolved to any network connected device (server, desktop or otherwise) which is identified as:

- posing a risk of malware infection to other USQ resources,
- posing a risk of data loss to non authorized entities,
- posing a risk to the correct operation of other USQ networked devices,
- posing a risk to the reputation of USQ.

ICT will attempt to contact ADFI prior to any denial of network access to identify the issue and discuss remediation. If contact is unsuccessful ADFI will be provided with a comprehensive description of the issue within 1 hour.

### ADFI Server in Non-USQ DMZ overview

- ADFI servers will be logically separated at the network level from USQ Systems.
- ADFI Servers will have no ingress into the USQ network.
- All non-ICT supported systems and all systems residing in ADFI Virtual infrastructure must reside in the non-USQ DMZ address block assigned to ADFI.
- ADFI Servers in the non-USQ DMZ will only use the 139.86.55.200-240 address range and must not encroach on other areas of the 139.86.55.1/24 address block.
- Access to services such as DNS, Time, Mail gateways, or other core services will only be provided by services which exist in the DMZ Services Zone.
- ADFI Servers may have default web exposure from Internet Ingress.
- ADFI will have the flexibility of running the server Operating Systems supported by ICT.
- Operating systems not support by ICT and outside of ICT managed scope will be the responsibility of ADFI to support.
- ICT will provide Virtual Machine instances or Initial Operating System ISO images and Secure Build Templates, for ICT Supported operating systems.
- ICT reserves the right to conduct security penetration testing of all ADFI systems without prior notification

### ADFI Responsibilities

- ADFI staff will be responsible for the security of all ADFI Servers residing in the DMZ. This includes but is not limited to the management of Anti-Virus solutions and Operating System and Application patching.

- Technical support of the all ADFI Servers and applications is the sole responsibility of the ADFI team.
- ADFI staff will be responsible for providing ICT with adequate information regarding non standard backup requirements and the management of classified data residing on ADFI systems

## ICT Responsibilities

- ICT will support the network infrastructure and physical hardware provided to ADFI. This will be handled within current Incident Management time frames as defined through the ICT Incident Management approach. Support calls should be lodged through the ICT Service Desk.
- ICT will perform periodic audits on both servers and desktops within the Non-USQ DMZ (including ADFI servers) to ensure that security and integrity is maintained within the environment. Any issues identified from these audits pertaining to ADFI infrastructure will be communicated with the Manager, ADFI.
- On request ICT will provide resource material, briefings on Information security best practice and outlines of audit processes.
- ICT will be responsible for the backup and disaster recovery of the environment, and will provide access to central backup infrastructure and liaise with ADFI regarding correct use of backup agents for non-supported operating systems
- Patching and maintenance of the VMWare ESX environment will be the responsibility of ICT.

## Backups

HP Data Protector Enterprise backup application will be used to backup the Servers in the ADFI infrastructure to tape. Data Protector client software is needed on all servers that require backups and it will be the responsibility of ADFI to ensure that the Servers have these clients installed.

Backup regime will consist of daily incremental backups, weekly full backups and monthly full backups. The daily incremental will be kept for 2 weeks, the weekly full's will be kept for 4 weeks and the monthly's will be kept for 3 months.

## Server Operating Systems

ICT currently supports the following Server Operating System Environments:

- Windows Server 2003
- Windows Server 2008
- Windows Server 2008 R2
- Sun Solaris
- Red Hat Enterprise Linux Version 4/5/6
- VMware ESX Version 3/4
- Apple Macintosh OSX

Should ADFI choose to use a non support operation system such as Ubuntu, it should be noted that ICT does not provide support for these, although will assist with providing best practice security guidelines

## Schedules for each project under ADFI

The Schedule of Services in conjunction with the Global Desktop SLA will form the umbrella for ADFI support. A separate schedule for each project will be prepared covering the details of all services for that project. The details of each schedule will be discussed and agreed upon with ADFI prior to signing.

# Appendix B VARIATIONS

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| Exception | Reason for Variation | Period of Variation | Hours of Service Coverage | Details of Service Change | Measures and Reporting | Parties Responsible |
|-----------|----------------------|---------------------|---------------------------|---------------------------|------------------------|---------------------|
|-----------|----------------------|---------------------|---------------------------|---------------------------|------------------------|---------------------|

Access Grid  
Infrastructure

**Cost of Variation:**

By signing below, all parties agree to the terms and conditions described in this variation to Service Level Agreement

|             |              |                  |             |
|-------------|--------------|------------------|-------------|
| <b>Name</b> | <b>Title</b> | <b>Signature</b> | <b>Date</b> |
|-------------|--------------|------------------|-------------|

| <b>Exception</b>                        | <b>Reason for Variation</b>                 | <b>Period of Variation</b> | <b>Hours of Service Coverage</b> | <b>Details of Service Change</b>  | <b>Measures and Reporting</b>                            | <b>Parties Responsible</b>  |
|---|---|----------------------------|----------------------------------|---|--|---|
| Technology Enhanced Learning Lab (TELL) | ICT support for Access Grid located in TELL | Ongoing                    | 8:00am-5:00pm<br>Monday - Friday | Maintenance of access grid computing equipment and existing access grid software.<br><br>Training in establishment of access grid sessions to staff nominated by ADFI<br><br>Handling of support requests for maintenance via the ICT Service Desk. | Reporting of KPI's under ADFI SOS and Global Desktop SLA | ICT Support Officers<br>Audio Visual Support<br>Data Communications Support.<br><br>ADFI staff as nominated for establishment of Access Grid sessions.<br><br>ICT Service Desk. |

**Not Covered by this Variation –:**

- Assistance with the day to day use and operation of the access grid facility including the booking of and the set-up of access grid sessions is not provided by ICT.

By signing below, all parties agree to the terms and conditions described in this variation to Service Level Agreement

|             |              |                  |             |
|-------------|--------------|------------------|-------------|
| <b>Name</b> | <b>Title</b> | <b>Signature</b> | <b>Date</b> |
|-------------|--------------|------------------|-------------|

| <b>Exception</b>                        | <b>Reason for Variation</b>   | <b>Period of Variation</b> | <b>Hours of Service Coverage</b> | <b>Details of Service Change</b>  | <b>Measures and Reporting</b>                            | <b>Parties Responsible</b>   |
|---|---|----------------------------|----------------------------------|---|--|--|
| Technology Enhanced Learning Lab (TELL) | ICT support for new technologies (hardware and software) purchased for TELL | Continuing                 | 8:00am-5:00pm<br>Monday – Friday | Consultation and advice re the purchase, use and operation of non-standard hardware and software within the USQ production environment. | Reporting of KPI's under ADFI SOS and Global Desktop SLA | Manager (Technology Enhanced Learning Projects)<br><br>Principal Manager – ICT Service Delivery<br><br>ICT Service Delivery Co-ordinators<br><br>Audio Visual Support Manager.<br><br>Other ICT staff as applicable. |

**Not covered by this variation:**

Assistance with day-to-day use and operation of non-standard hardware and software within TELL outside of the USQ production environment.

By signing below, all parties agree to the terms and conditions described in this variation to Service Level Agreement

|             |              |                  |             |
|-------------|--------------|------------------|-------------|
| <b>Name</b> | <b>Title</b> | <b>Signature</b> | <b>Date</b> |
|-------------|--------------|------------------|-------------|

| <b>Exception</b>                        | <b>Reason for Variation</b>          | <b>Period of Variation</b> | <b>Hours of Service Coverage</b> | <b>Details of Service Change</b>   | <b>Measures and Reporting</b> | <b>Parties Responsible</b>   |
|---|--------------------------------------|----------------------------|----------------------------------|--|-------------------------------|--|
| Technology Enhanced Learning Lab (TELL) | Training support for ADFI technology | Ongoing                    | 8:00am-5:00pm<br>Monday – Friday | <p>Consultation, development, design and or/presentation of training in Virtual Worlds and other ADFI identified learning and teaching requirements.</p> <p>This support will be negotiated on a case-by-case basis.</p> | Training evaluations          | <p>Manager (Technology Enhanced Learning Projects)</p> <p>Principal Manager – ICT Service Delivery</p> <p>ICT Trainers</p> |

By signing below, all parties agree to the terms and conditions described in this variation to Service Level Agreement

|             |              |                  |             |
|-------------|--------------|------------------|-------------|
| <b>Name</b> | <b>Title</b> | <b>Signature</b> | <b>Date</b> |
|-------------|--------------|------------------|-------------|

| <b>Exception</b>                        | <b>Reason for Variation</b>                | <b>Period of Variation</b> | <b>Hours of Service Coverage</b> | <b>Details of Service Change</b>   | <b>Measures and Reporting</b>                            | <b>Parties Responsible</b>  |
|---|--|----------------------------|----------------------------------|--|--|---|
| Technology Enhanced Learning Lab (TELL) | ICT support for Virtual Worlds technology. | Continuing                 | 8:00am-5:00pm<br>Monday – Friday | Client side installation and configuration of Virtual Worlds software in S107 dual purpose computer laboratory.<br><br>Handling of support requests for maintenance via the ICT Service Desk.<br><br>Maintaining booking Calendar for S107 | Reporting of KPI's under ADFI SOS and Global Desktop SLA | ICT Service Delivery Co-ordinators.<br>ICT Service Desk<br>ICT Training |

By signing below, all parties agree to the terms and conditions described in this variation to Service Level Agreement

|             |              |                  |             |
|-------------|--------------|------------------|-------------|
| <b>Name</b> | <b>Title</b> | <b>Signature</b> | <b>Date</b> |
|-------------|--------------|------------------|-------------|