MiWorkspace Service Level Expectations
Effective Date: January 5, 2015

Service Definition

MiWorkspace is a service providing technology support for U-M's faculty, staff, and students, and the computers we use daily: laptops, desktop computers, and mobile devices. The MiWorkspace service keeps local support experts in schools, colleges, and units across the Ann Arbor campus to rapidly answer questions and provide support. At the same time, these IT staff members are part of a larger and deeper team that includes the customer support specialists at the ITS Service Center and engineers with deep technology expertise.

Major aspects of MiWorkspace include support for university-owned Macs and Windows computers; integrated support for wired and wireless connectivity, file storage, data security and compliance, and printing. Use of mobile devices (smartphones, tablets) and personally-owned computers is supported at a more basic level, and enhancements are being planned as we embrace the "bring your own device" technology trend. Behind the scenes, engineers provide the backend systems and operations required to deliver a solution that works smoothly in the larger U-M and non-U-M technology environments.

Intended Consumers

MiWorkspace is a comprehensive service for participating units of the Ann Arbor campus, and their faculty, staff, students, and other community members. All those using university-owned computers receive support. The U-M Health System is not participating in MiWorkspace.

Value Statement

As a consolidated service, MiWorkspace provides a consistent computing experience for subscribers, a unified approach to protecting university data, and a common technology infrastructure that better supports collaboration. The design of MiWorkspace also enables better access to services, from anywhere at anytime to better serve our increasingly mobile community. Providing the common, and commodity features of MiWorkspace as a university service enables campus units to focus resources on the specialized challenges that advance the specific mission of their unit.

Management and Governance

<table>
<thead>
<tr>
<th>IT Service Role</th>
<th>Individual</th>
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<tr>
<td>Service Owner</td>
<td>Bob Jones</td>
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A campus advisory group for MiWorkspace serves a governance role, addressing:

- Continuous improvement feedback and priorities.
- Service issues and resolution prioritization.
- New/changing requirements and expectations for features, quality, and cost.
- Joint accountability factors.

**Service Details**

Subscribers experience a fully supported computing environment with the following key features:

### 1. Service for Laptops and Desktops

- Subscribers experience a secure computing environment that allows easy access to applications and information. Windows and Mac hardware and software are supported. The service initially supports subscribers’ existing hardware and software. When it is time for hardware to be replaced (usually when equipment is 3-5 years old), the new service helps plan for and provides the updated hardware. ITS works with U-M Property Disposition to properly and securely dispose of old equipment.

- **Hardware Costs** – The cost of new and replacement hardware remains the responsibility of the individual unit.
- **New Hardware** – Units may choose to order equipment well in advance so that it is available for new or current subscribers. On behalf of the unit, ITS procures all standard new hardware through U-M strategic partners. New equipment orders may require 2-8 weeks advance notice, depending on the equipment vendor. Coming in 2015: view hardware specifications on the IT Services Portal.
- **Special Order Computers** – Knowledgeable specialists are available to consult with subscribers on special configurations and help them with project planning, coordination, installation, and logistics (see the *Service and Fees* section below). Special-order computers are available for additional needs (e.g., higher capacity workstations) above and beyond what is covered by laptop and desktop support. Subscribers can expect ITS to process special orders promptly; at this time, ITS does not have a way to regularly measure and report on the time needed to fulfill special orders.
- **Peripherals** – Knowledgeable specialists are available to consult with subscribers on peripherals and help them with purchase recommendations and installation (see the *Service and Fees* section below). Units are responsible for processing the order through regular procurement processes.
- **Computer Repairs** – ITS provides or facilitates computer repair; the cost of non-warranty repairs remains the responsibility of the individual unit. Failed hardware is replaced with loaner equipment or a replacement within one business day of when the issue is reported. Loaner equipment is supplied from unit or MiWorkspace stock while the failed equipment is being repaired. Where possible, equipment is replaced by like or better equipment from unit stock (see the *Loaner Equipment* section below).
- **Workstation Support Approach** – ITS supports workstation hardware, operating system, and drivers; and provides software access as described below. Support for some specialized workstation configurations requires subject matter experts (SME’s) within the unit (e.g. Unit IT, research staff,
graduate students) to maintain specialized application expertise and knowledge of the laboratory equipment/instrumentation, or unit-unique systems. When an SME leaves, knowledge transfer is the responsibility of the unit; ITS will document knowledge to ensure the most common support scenarios are well understood and can be handled by a variety of technicians.

2. Comprehensive Support Options – Multiple options for support are available:

- **Local Support Experts** – Subscribers can rely on the continuity of a familiar, locally-based support technician to rapidly answer questions and provide personalized support. The support technician, while locally-based, is part of the ITS organization in its role as a shared service provider for MiWorkspace. MiWorkspace local support experts have access to extensive expertise, such as shared best practices, expanded knowledge base, and advanced technical engineering.

- **ITS Service Center (4-HELP)** – The ITS Service Center has tools and processes to deliver a high standard of customer service. Knowledgeable support specialists are available to answer questions and provide support related to the use of common applications, hardware, and other issues. Support is available via phone, email, or by submitting a service request online (self-serve feature). Remote support for troubleshooting and shadowing is available.

- **Self-Help** – Support documentation and online resources are available, including access to how-to articles, the ability to review and track tickets, and the option to request additional services.

- **Executive-Level Support** – Units may identify subscribers to be part of an executive-level support group. As members of this group, subscribers will benefit from prioritized service during regular hours and on-call support after regular hours. Issues are closely monitored by an incident manager who ensures all tickets meet or exceed established service level expectations. Executive-level support is designed for a small percentage of subscribers involved in the unit’s most mission-critical and time-sensitive work.

- **User Onboarding** – On request from the unit, ITS delivers and installs computers and software, and provides an IT orientation for new or transferring employees. Units should request hardware, software, and orientations at least three business days in advance. If a new workstation needs to be ordered for new or transferring employees, a loaner machine may be provided on a first-come, first-served basis. ITS engages with the unit as needed for approval and to identify which computer should be provisioned for the new subscriber.

- **Support Tools** – Smooth handoffs of information and support activities between ITS and unit IT requires that both ITS and unit IT staff use a shared support tool: ServiceLink. ITS and unit IT staff will route tickets to each other as applicable. ITS provides access to ServiceLink for unit IT staff, and a configuration that supports:

  - **Unit-specific Configurations** – Each independent IT organization is uniquely recognized as an IT Service Provider for its specific services, with unit-defined knowledge records and settings for hours of support; support targets/expectations; and limited control over customer notifications. It also provides the ability to see the work, users, and MiWorkspace hardware from the unit’s perspective. The unit may view high-level trends through meaningful views and reports.
Service Level Expectations
MiWorkspace

○ **Access to User Information** – Unit IT staff can view all tickets submitted by their users, regardless of which service provider responded. This includes the ability to view detailed user information, including ticket history.

○ **Hardware Inventory for MiWorkspace-Managed Systems** – Unit IT staff can view the MiWorkspace-managed hardware inventory associated with their organization. To help with the accuracy of tracking the hardware, staff have access to edit the location and user information associated with the hardware.

Additional support tools, features, and consulting services may be available outside the scope of MiWorkspace.

### 3. Software Access

MiWorkspace includes access to a store of software titles for Mac and Windows platforms that are licensed by the university or the unit, and tested by ITS for compatibility with MiWorkspace systems. Units can specify a standard software collection for their faculty and staff. Subscribers can self-initiate some software downloads (for Macs and Windows) and may request additional software subject to the unit’s defined approval process.

Software cost is the responsibility of the unit. Units are expected to identify an individual to provide approval for all software requests. Units are expected to provide access to software installation media for software titles not previously packaged by the MiWorkspace team. Software licensing costs, either renewing existing or purchasing new, are the responsibility of the individual unit (see the Service and Fees section below). Units are also responsible for managing their licenses.

ITS delivers software per the expectations below. If approval is required, the intervals below apply after unit approval is granted.

- If a requested title is included in a unit’s catalog, delivery occurs within one business day.
- If a title has to be acquired for fewer than 10 subscribers, it is deployed within three business days of receiving the software media.
- For larger-scale installations, software is packaged for deployment within 10 business days. Additionally, each piece of software is different and may pose deployment challenges. Any exceptions will be clearly communicated.

### 4. Mobile Devices

The university community is increasingly mobile and expects to access U-M resources from both personally-owned and university-owned mobile devices. MiWorkspace provides support to securely connect compatible personal or university-owned mobile devices to:

- the U-M network, including VPN protection.
- MiWorkspace-managed network printers.
- [M+Google](#), including email and calendar.
- [M+Box](#).

Selecting, purchasing, and learning to use devices, or finding specific U-M resources, remains the responsibility of individuals, or in some cases, the unit.
5. Storage and Backup – ITS provides access to secure storage for both individual and departmental files. Files stored on these network locations are backed up regularly. These storage options are designed as general-purpose storage, and may not meet specialized performance requirements for research, working with video, high performance data capture, analysis, visualization, etc.

- **Departmental (Shared) File Space Access** – Shared files can be stored and backed up on a secure storage platform hosted internally by U-M.
- **User Home Directory File Space Access** – Each subscriber receives storage provided on equipment in a secure storage platform hosted internally by U-M. Windows computers automatically sync between the computer’s hard drive and this network home directory.
- **Optional: Desktop Backup (CrashPlan)** – Desktop and laptop backup is available for a fee by request. ITS and units will work together to determine who will benefit from this feature of MiWorkspace.
- **Additional Storage Services** – ITS provides additional options for cloud file storage and collaboration that compliment MiWorkspace. As part of the MiWorkspace service, ITS installs the sync client software for M+Box and Google Drive. Visit the IT Services Portal for more information.

6. Network – Subscribers have on-campus wired and wireless connectivity and can use the virtual private network (VPN) to protect remote connections to U-M. ITS provides:

- **Equipment Monitoring** – ITS monitors network equipment within campus buildings and across the shared campus network.
- **Administration** – ITS configures network equipment as needed.
- **Capacity and Lifecycle Analysis** – ITS tracks the replacement cycles for equipment, the capacity and utilization of the network, and works with units to plan replacements and changes.
- **Procurement and Installation** – ITS handles purchasing and installation of network equipment to provide service at the standard level. Units are responsible for capital charges when adding capacity, coverage, or other upgrades and replacements for in-building network equipment.
- **Maintenance and Repair** – ITS responds to in-building network equipment and infrastructure experiencing failures Monday through Friday, 8:00 a.m. - 5:00 p.m. Normal university holidays and season days are observed. Units have the option to purchase 24x7 response. Refer to the In-Building Networks Service Level Expectations for additional details on the types of equipment and infrastructure covered and specific response times.

7. Printing – The MiWorkspace service enables printing from university-owned or personally-owned devices to a broad spectrum of university-owned network printers. ITS recommends purchasing and installing multifunction printers in consultation with U-M Procurement. Units may also continue to supply and maintain some or all of their printers; ITS can recommend specific models, and process orders on behalf of units.

Additional printing details:
- **Networked Printers** – Networked printer features include self-service installation based on
building floor plan for both Windows and Mac platforms, and print quantity reporting over time.

- **Follow Me Printing** – ITS recommends card readers with multifunction printer devices to take advantage of Follow Me Printing. Follow Me Printing is a cloud-based print queue that allows on-demand and secure printing. In addition, Follow Me Printing allows documents to be held in a queue, and released on demand at enabled Follow Me Print devices.

- **Printer Address Books** – ITS recommends card readers with multifunction printer devices to eliminate the need to configure address books and user boxes on each printer. Units may choose to continue to maintain address books and user boxes. ITS believes that this effort is best accomplished by staff in the unit, not by ITS.

- **Locally-Attached Printers** – ITS installs and connects locally-attached desktop printers (inkjets, small format multifunction printers, etc.). Printing to these devices does not take advantage of the advanced features available for network printers.

- **Supplies** – Units are expected to supply and replace paper, toner, ink, and similar supplies.

- **Printer Troubleshooting and Repair** – ITS provides initial troubleshooting for printing issues and engages other vendors or services as needed. ITS facilitates printer repair for Konica, HP and Xerox. The unit is responsible for the cost of all non-warranty repair.

- **Procurement Partnership** – MiWorkspace enables a managed printer offering through partnership with U-M Procurement’s Print Smart service. Procurement Services and the printer supplier work with units to survey needs and identify the right mix of network printers to meet the unique needs for each location. ITS manages the hardware installation and implementation; the printer supplier (e.g. Konica) is responsible for maintenance of printer hardware; and units manage the supplies. Print Smart strives to move 100% of unit printing to high-efficiency network printers, minimizing the environmental impact of desktop printing. Coming in 2015: View printer hardware specifications on the IT Services Portal.

### 8. Loaner Equipment

Equipment is available to borrow on a short-term basis. Some equipment is available for longer terms. ITS offers both delivery and pickup options.

- **Unit-Owned Loaner Equipment** – Units may choose to have ITS manage their loaner equipment (laptops, desktop computers, monitors, peripherals, clickers, etc.) when they adopt the MiWorkspace service. Initially, ITS will adopt the unit’s existing procedures and tools. Changes for a common campus approach may be planned in the future (e.g. adoption of a common reservation and scheduling tool) and will be discussed with units before implementation. ITS and units can plan additional services regarding loaner equipment, by mutual agreement.

- **Equipment Loans for Machine Failures** – When a MiWorkspace-managed laptop or desktop needs repairs, ITS can supply loaner equipment at the request of the user. Loaner equipment is supplied within one business day. Weekend and on-demand replacement of equipment is available for pickup at the closest facility.

- **Other Short Term Individual Loans** – ITS offers a campus-wide pool of laptops and desktops available for travel, for new employees awaiting their newly ordered computer, etc. One to three devices can be requested for short-term loans (up to two weeks). Subscribers are asked to make requests for loaners three business days in advance. ITS fulfills these requests on a first-come first-served basis, within two business days.
● **Special Needs Loans** – ITS offers longer-term loans of laptops and desktops for special needs such as projects, events, and testing. Loans up to 90 days are available. When requesting 1-3 devices, subscribers are asked to make requests for loaners three business days in advance. When requesting four or more devices, subscribers are asked to provide two weeks advance notice. ITS fulfills these requests on a first-come, first-served basis. If the ITS loaner pool does not have equipment available to meet the needs, units may choose to purchase new equipment; new equipment orders may require 2-8 weeks advance notice, depending on the equipment vendor.

9. **Security** – Security is integral to every aspect of MiWorkspace: from malware defense, disk encryption, and core infrastructure, to the protection of file storage. In addition to secure technology, subscribers to MiWorkspace can rely on ITS’s trained security personnel to continuously respond to emerging threats, minimize IT security-related service disruptions, protect sensitive data stored on MiWorkspace workstations and services, and more.

Units adopting MiWorkspace are asked to identify a staff person to take on, or continue, the role of “Security Unit Liaison.” Typically this is a staff person with operational leadership in the unit (not necessarily specific to IT) who can be particularly effective in coordinating work and communicating throughout the unit. ITS security staff will work with this person in planning and carrying out security and compliance activities such as risk assessments.

Faculty, staff, and students in units using MiWorkspace should contact the ITS Service Center to report IT security incidents or inquire about policy and compliance issues.

MiWorkspace workstations benefit from the following enhanced IT Security Services:

- **Enhanced Network Monitoring and Protection** – ITS provides early detection of network attacks and compromises associated with workstations storing sensitive information.
- **Risk Management** – ITS provides a trained security professional to perform risk assessments against sensitive or mission-critical environments. For environments that are part of the MiWorkspace platform, ITS then leads the implementation of mitigating controls. For unit-unique environments, the unit is responsible for implementation of mitigating controls.
- **Data Loss Prevention (DLP) Scan** – A DLP scan is an automated scan designed to detect social security numbers and credit card numbers; it is performed every six months on MiWorkspace storage and workstations. ITS and Security Unit Liaisons work together to ensure that the storage of these types of sensitive and regulated data is appropriately maintained and secured. Mitigation for DLP scans may involve updates to business practices, and changing whether, how, and where this data is stored and secured.
- **Vulnerability Management** – ITS provides frequent, in-depth vulnerability scanning of MiWorkspace systems to identify and properly mitigate high-risk exposures. ITS provides scanning to detect publicly known vulnerabilities adversaries may exploit.
- **Information Asset Classification** – ITS identifies and tracks MiWorkspace workstations that store sensitive data.
- **Workstation Hardening** – ITS ensures compliance with applicable regulations, utilizing appropriate configurations and controls to protect sensitive data stored on MiWorkspace workstations. For
example, all MiWorkspace laptops are encrypted.

In addition to the security features that are included with MiWorkspace, ITS provides the IT Security Essential Service for all units, including security education and awareness efforts; response to serious IT security incidents; and other foundational protections for university resources. More specialized services are available by arrangement, including IT Security Consulting, Disaster Recovery and Continuity Planning, and Ethical Hacking.

10. Classroom Technology Support – ITS provides classroom technology support if the unit IT staff doing that work transition to ITS as part of the MiWorkspace implementation. Initially, ITS classroom technology support is provided as the unit does today. More comprehensive instructional support is expected to stay within schools and colleges. ITS will work with campus partners to adopt best practices for classroom operations and support. Units will continue to pay for computers, network, audio-visual equipment, and software licenses for classroom use.

11. Bring Your Own Device (BYOD) – ITS helps MiWorkspace subscribers access the U-M infrastructure from their personally-owned devices: MWireless, VPN, printing, M+Google, and M+Box. The U-M Standard Practice Guide directs members of the university community who access or maintain sensitive institutional data to secure such data by properly managing the privacy and security settings on their personally-owned devices.

12. Student Computing – Student staff members who use university-owned computers will receive regular MiWorkspace support. Students who are not staff members are supported through the ITS Service Center, Campus Computing Sites, and the Computer Showcase. ITS can provide additional student computing services, by specific agreement between ITS and the unit.

13. IT Support for Events – ITS provides technology support for events when a request is submitted at least 10 business days in advance; this lead time allows for scheduling appropriate staff, loaner equipment, and other logistics. ITS provides before-event and after-event technology support during standard hours for needs such as:
   ○ Loaner equipment (see the Loaner Equipment section for details).
   ○ Setup and tear-down of loaner equipment on the Ann Arbor campus.
   ○ Temporary network setup and tear-down on the Ann Arbor campus.
   ○ Assistance with special setups, and troubleshooting for U-M technology, on the Ann Arbor campus.

Consulting or support for events during non-standard hours require individual discussion and planning at least 10 business days in advance, and may evolve to requiring a time-and-materials charge. In the case of events using third party technology or having multi-media requirements, ITS staff plays a ‘liaison’ role rather than an ‘expert’ role.

Units are expected to retain responsibility for broader (non-IT) event planning and coordination, as well as on-site technology support when required for the duration of an event.

Future: Packaged Linux Service – In 2015, ITS expects to provide access to various Ubuntu packages,
including: identification, authorization and authentication, printing, storage, VPN access, and MWireless. Subscribers will be able to download these packages for installation on unit- or self-managed Ubuntu systems.

Service Expectations
Subscribers should expect a consistent experience every time they use the service.

Planned Infrastructure Maintenance
Networks and other back-end systems require periodic maintenance and may be unavailable during some maintenance operations. When needed, ITS announces maintenance on the ITS Service Status page for these maintenance windows:

- Saturday 11:00 p.m. to Sunday 7:00 a.m. for storage and some other systems.
- Daily 4:00 a.m. to 7:00 a.m. for in-building and shared campus network equipment.
- Sundays 5:00 a.m. to 8:00 a.m. for network maintenance that will interrupt connectivity for all units on the shared campus network.
- Additional hours as announced by the university’s Internet Service Provider.
- Four weekends each year, normally during the months of February, May, August, and November, for maintenance at U-M data centers.

Subscribers’ devices can usually continue operating, but access to specific features such as network printing and files may be impacted during these maintenance operations.

Emergency Infrastructure Maintenance
In rare instances, an emergency may require an urgent maintenance process or change and a related disruption of the service. ITS follows a standard process for emergency changes and announces these changes on the ITS Service Status page.

Workstation Changes and Service Enhancements
The reporting and communication regarding changes and enhancements depends on the type. These are detailed below:

- **Routine Software and Security Updates** – Updates are implemented on a regular basis (weekly on Fridays, when practical). No email communications are sent regarding routine updates. All updates are posted on the ITS Service Status page. Subscribers are prompted, as needed, to restart their system when needed to apply system updates.

- **Enhancements** – Enhancements typically change the subscriber’s experience. A communication plan is created and the communications are shared with unit leadership and affected subscribers. Standard build, test, and deployment processes are followed for enhancements. Recommendations for enhancements for the MiWorkspace Service will be continuously evaluated. Units and individuals can provide suggestions or feedback directly to your unit’s Customer Relations Manager, Neighborhood IT Manager, or the MiWorkspace Service Owner, Bob Jones, at rjonesii@umich.edu. Larger changes will be reviewed with the MiWorkspace Advisory Group and other IT Governance
Groups to weigh costs and benefits for the larger campus community

- Emergency Changes – Emergency changes include fixes to critical functionality or security-driven releases and may or may not impact the user interface. Emergency changes are implemented as quickly as possible and are communicated post-release (or pre-release, if viable).
- Service Level Revisions – Documented service level expectations will be updated in consultation with the MiWorkspace Advisory Group, other IT Governance Groups, and units participating in the MiWorkspace Service. Revisions are expected every 6-12 months.

Service Support

Requesting Support

Requests for support regarding ITS services are processed through the ITS Service Center. To contact the Service Center:

- Call 734-764-HELP (764-4357) - recommended for issues that require immediate attention.
- Submit a Service Request Online or email 4HELP@umich.edu.

Support Hours

- **ITS Service Center (4-HELP) and Local Support Experts** – Service Center and Local Support is available:
  - Monday-Thursday, 7:00 a.m.-7:00 p.m.
  - Friday, 7:00 a.m.-6:00 p.m.
  - Sunday, 2:00 p.m.-7:00 p.m.
  - ITS observes university holidays, season days, and university declarations of emergency reduction in operations.
- **Additional Hours** – Additional hours of support may be scheduled, by agreement of ITS and the unit (see the Service and Fees section below).
- **Business Days** – The term “business days” throughout this document means Monday - Friday, excluding university holidays and season days.
- **Executive-Level Support** – Executive-level support is available 24x7.

Initial Response Times for Support Issues:

- **ITS Service Center Support** – The ITS Service Center answers support calls in the order received with a target average hold time of no more than three minutes. If the issue is not resolved within one hour of the initial call, the ITS Service Center escalates the issue to local support technicians. Initial response for contacts via email or online forms is typically provided within four hours, during the support hours outlined above.
- **Local Support** – A technician provides an initial response to the issue within four hours of standard request, during the support hours outlined above.

Incidents and Outages
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<th>Priority</th>
<th>Description</th>
<th>Target to Restore Services</th>
<th>Examples</th>
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<tr>
<td>Critical</td>
<td>Incidents are classified as critical priority when there is a major, immediate risk to the organization’s ability to conduct its mission, because of disruption to users’ ability to perform a function related to that mission.</td>
<td>4 hours</td>
<td>Building-wide network outages, campus-wide disruptions to MiWorkspace services (MiApps, printing, storage, etc.), and serious IT security incidents</td>
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<td>High</td>
<td>Incidents are classified as high priority when there is an elevated risk to the organization’s ability to conduct its mission, because of disruption to users’ ability to perform a function related to that mission.</td>
<td>1 business day</td>
<td>Disruptions to the ability to distribute software, individual workstation failures, and ability to build new workstations.</td>
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<td>Medium</td>
<td>Incidents are classified as medium priority when users’ ability to perform a function is impaired, and a risk to the organization’s ability to conduct its mission is present, but the organization can manage around that risk over a short period of time.</td>
<td>5 business days</td>
<td>Bug-fixes and ad-hoc requests may be considered medium or low priority incidents depending on the number of users impacted and urgency of request/incident.</td>
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<tr>
<td>Low</td>
<td>Incidents are classified as low priority when users’ ability to perform a function is impaired, but there is minimal risk to the organization’s ability to perform its mission.</td>
<td>10 business days</td>
<td>Bug-fixes and ad-hoc requests may be considered medium or low priority incidents depending on the number of users impacted and urgency of request/incident.</td>
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Data Retention and Restoration
Backup and Restoration for Departmental (Shared) File Space, and User Home Directories
### Backup and Restoration

Subscribers on the Windows platform can use the network storage *snapshot* feature to make self-service restorations. Mac subscribers can use MiApps or contact Neighborhood IT for assistance with snapshot restoration.

Snapshots are taken:
- Twice daily, and retained for 3 days
- Nightly, and retained for 7 days
- Weekly, and retained for 8 weeks

In addition to snapshots, a disaster recovery backup is created nightly and stored off-site.

### Data Retention

Deleted files are retained for 30 days. Snapshots are retained for 8 weeks.

### Roles and Responsibilities

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The service owner is responsible for continuous improvement of the MiWorkspace service to align with university missions and service portfolio, as well as cost of the service.

The service manager is responsible for the end-to-end performance of the MiWorkspace service, ensuring it meets service level expectations and escalating issues to appropriate stakeholders.

Many aspects of MiWorkspace will be effective only if ITS and units take joint ownership. The table below highlights those shared responsibilities, as well as areas where the primary responsibility lies with ITS, and areas where campus units are primarily responsible.
### 1. Service for Laptops and Desktops

**Plan for new and replacement hardware**
- ITS: Provide inventory information for existing hardware
- Unit: Choose whether to order computers and displays in advance and keep stock on hand. Approve/deny requests

**Process orders (via Procurement) for new and replacement computers and displays**
- Request in advance

**Order (via Procurement) peripherals and software licenses not already covered; track licenses. Approve/deny requests**

**Provide consulting; project planning; coordination; installation; and logistics for special orders**

**Install hardware and software, within three business days once hardware and software is available**
- Request in advance

**Provide a MiWorkspace orientation for new or transferred staff**
- Submit an Onboarding Request, in advance

**Provide loaner or replacement for failed hardware, within one business day**

**Dispose of old equipment properly and securely, with Property Disposition**

### 2. Comprehensive Support

**Provide self-help resources**
- Use self-help resources

**Provide a consistent point of contact for requesting help (ITS Service Center)**
- Contact the ITS Service Center for help

**Provide local support experts, as well as computer, phone, and office supplies for these staff members**
- Provide work space; furniture; access to building and printers/copiers

**Ensure effective information flow and workflow between ITS and unit IT/leadership**
- Maintain regular meetings between the unit and ITS, especially unit IT/leadership and ITS Neighborhood IT
- Use ServiceLink to monitor and respond to incidents and requests; access the knowledgebase

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<tr>
<td>Provide loaner or replacement for failed hardware, within one business day</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Dispose of old equipment properly and securely, with Property Disposition</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>2. Comprehensive Support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide self-help resources</td>
<td>Use self-help resources</td>
<td>✓</td>
</tr>
<tr>
<td>Provide a consistent point of contact for requesting help (ITS Service Center)</td>
<td>Contact the ITS Service</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Center for help</td>
<td></td>
</tr>
<tr>
<td>Provide local support experts, as well as computer, phone, and office supplies</td>
<td>Provide work space;</td>
<td>✓</td>
</tr>
<tr>
<td>for these staff members</td>
<td>furniture; access to building</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and printers/copiers</td>
<td></td>
</tr>
<tr>
<td>Ensure effective information flow and workflow between ITS and unit IT/leadership</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
| Service Level Expectations | MiWorkspace
---|---|
Provision executive-level support, including support staff | Designate faculty and staff who will receive this level of support ✔

3. Software Access

Maintain unit standards for software collections, and approval process for additional software
- ITS: Maintain records of the software standards and seek approval from units when additional software is requested
- Unit: Designate which software is included as standard in software collections, and approve/deny requests for additional software ✔

Deliver licensed software | Request in advance; approve requests ✔

4. Mobile and Remote Access

Provide support to connect mobile devices to the U-M Network, M+Google, M+Box, and the capability to print ✔

Select and purchase if supplying university-owned devices; learn to use devices and specific U-M resources ✔

5. Storage & Backup

Provide file services for user home directories and shared/departmental files; manage user permissions (e.g. Active Directory) ✔

Provide desktop backup for an additional fee | Work with ITS to determine who will benefit ✔

6. Network

Plan and manage capacity of the network, lifecycle of equipment, changes, and updates
- ITS: Monitor and track capacity and lifecycle ✔
- Unit: Provide knowledge of the facilities and requirements of faculty, staff, and students ✔

Procure and install network equipment ✔

Provide support for wired and wireless access to the U-M Network including secure access from mobile and off-campus connections ✔

Monitor, configure, maintain, and repair shared campus network equipment (campus backbone and internet connection) ✔

Monitor, configure, maintain, and repair in-building network equipment. Repair responses are Monday to Friday, 8:00 a.m.-5:00 p.m. A 24x7 repair options is available for an additional fee If desired, purchase 24x7 repair option ✔
### 7. Printing

Provide printer hardware and supplies
- ITS recommends purchasing and installing printers in consultation with U-M Procurement
- Unit supply and replace toner, ink, and similar supplies

| ✔ | Partner with Unit and Procurement on installation |

Provide printer support
- Enable printing to network printers and locally-attached printers
- Provide initial troubleshooting for printing issues; ITS facilitates printer repair for Konica, HP and Xerox

| ✔ | ✔ |

Enable Follow Me printing, secure printing, and scan-to-email on compatible multifunction devices
- ITS: Provide these functions when units purchase the appropriate card readers
- Unit: Maintain address books and user boxes on multifunction devices without card readers

| ✔ | ✔ |

### 8. Loaner Equipment

Manage unit-owned loaner equipment
- ITS: Manage loadsets and repairs for loaner laptops
- Unit: Manage reservation and check-out processes

| ✔ | ✔ |

Provide equipment loans for machine failures

| ✔ |

Provide short-term individual loans and loans for special needs

Request in advance

| ✔ |

### 9. Security

Designate a unit staff person as the Security Unit Liaison (SUL) to coordinate with ITS on unit-specific security activities

| ✔ |

Provide trained security personnel to perform unit security activities associated with the MiWorkspace environment. Example activities include:
- Collaborate with the SUL to coordinate security priorities for the unit
- Education & Awareness
- Assist with responding to security reports (e.g. vulnerability, DLP)
- Security Advising
- User account access & privilege reviews

Work with ITS to coordinate unit activities.

| ✔ |

Secure MiWorkspace desktops and laptops; networks; storage; and other back-end infrastructure
- Provide anti-virus and patching
- Monitor and respond to compromised systems
- Perform routine scanning to ensure systems and data are secure
- Perform risk assessments, develop risk treatment plans, and lead implementation of mitigating controls for MiWorkspace supported systems
- Support specific compliance requirements (e.g., for storing FERPA or HIPAA data)

<p>| ✔ |</p>
<table>
<thead>
<tr>
<th>Identify and track sensitive assets</th>
<th>✔</th>
<th>✔</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ITS: Identify and track MiWorkspace systems that store sensitive data</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>• Unit: Identify and track other sensitive and mission-critical assets</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Respond to security incidents, policy and compliance inquiries</td>
<td>Report security issues to the ITS Service Center</td>
<td>✔</td>
</tr>
</tbody>
</table>

### 10. Classroom Computing

<table>
<thead>
<tr>
<th>Provide classroom support</th>
<th>✔</th>
<th>✔</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ITS: Provide classroom support, if classroom support staff transition to ITS</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>• Unit: Continue to provide classroom support, if classroom support staff stay in the unit</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

### 11. Bring Your Own Device (BYOD)

| Provide access to the U-M Network, M+Google, M+Box, and the capability to print | ✔ |
| If accessing or maintaining sensitive institutional data from a personally-owned device, self-manage privacy and security settings on the device | Individual members of the U-M community |

### 12. Student Computing

| Support student access to wireless and wired connectivity (ITS Service Center); computer labs (Campus Computing Sites); printing; selected software titles and for-fee consulting and repair (Computer Showcase) | ✔ |
| Provide additional student computing services, by agreement | ✔ | ✔ |

### 13. Event IT Support

| Plan and coordinate events | ✔ |
| Provide technology support before and after events including loaner equipment; setup and tear-down; liaison with other technology/service providers | Request in advance | ✔ |
| Staff the event to provide ongoing technology support, audio-visual support, etc | ✔ |
| Provide additional event support, by agreement | ✔ | ✔ |

**Future: Packaged Linux Service**

| Expected in 2015 |

**Additional Areas**

| Support conference room technology | ✔ | ✔ |
| Support web conferencing | ✔ | ✔ |
| Create sponsored accounts and manage email (MCommunity) groups | ✔ |
| Manage Service Level Expectations and provide trend reporting | ✔ |
System Requirements

Hardware and software must meet minimum requirements to be supported within the above expectations. Purchase of new and replacement hardware and software remains the financial responsibility of the unit.

Workstations that do not (a) meet the minimum requirements, or (b) cannot for some technical or mission-related reason be rebuilt with the standard MiWorkspace loadset are supported on a best-effort basis. Other expectations outlined for the MiWorkspace service do not apply for this best-effort support.

Service Performance

Service Metrics & Reporting

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Expectation</th>
<th>How Measured</th>
<th>How Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request Fulfillment</td>
<td>User Onboarding - Equipment for a new/transferred subscriber</td>
<td>Equipment is delivered and installed within three business days of time of request when the unit has equipment on hand. For newly ordered equipment, delivery, and installation takes place within 3 business days of ITS receiving the equipment from the vendor. An IT orientation for the subscriber is scheduled at a mutually agreeable time.</td>
<td>Business days are Monday - Friday, excluding university holidays and season days.</td>
<td>Monthly reporting on the number of new hardware devices for new/transferred subscriber, and the time to fulfill requests.</td>
</tr>
<tr>
<td>Incident Resolution</td>
<td>Time to resolve</td>
<td>ITS reports out on actual time to resolve incidents categorized by priority. (E.g. Critical, High, Medium, Low)</td>
<td>Percentage of resolution by status</td>
<td>Monthly reporting</td>
</tr>
<tr>
<td>Incident Resolution</td>
<td>Replacement of failed</td>
<td>Within one business</td>
<td>Business days are</td>
<td>Monthly reporting on</td>
</tr>
<tr>
<td>Incident Resolution</td>
<td>ITS Service Center Support</td>
<td>The ITS Service Center answers support calls in the order received with a target average hold time of no more than three minutes. The ITS Service Center dispatches local support within one hour of initial contact.</td>
<td>Within the support hours noted above</td>
<td>Monthly reporting on the number of calls/contacts to the ITS Service Center, and hold times</td>
</tr>
<tr>
<td>Incident Resolution</td>
<td>Local Support</td>
<td>A technician responds within four hours, during the support hours noted above.</td>
<td>Within the support hours noted above, starting from the time the ITS Service Center makes a dispatch request</td>
<td>Monthly reporting on the number of incidents for which local support staff were dispatched, the time elapsed before dispatch by the ITS Service Center, and the time for the response by local support staff</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>ITS Service Center / Customer Relationship Managers</td>
<td>80% of subscribers report positive satisfaction in the targeted survey</td>
<td>ITS surveys subscribers’ satisfaction with the support they receive, with additional satisfaction assessed via the Business &amp; Finances Customer Satisfaction Survey</td>
<td>ITS Service Center incident closure satisfaction survey; ITS staff engages with customer representatives regularly (at least twice a year) to assess and discuss satisfaction with the service</td>
</tr>
</tbody>
</table>

### Service and Fees

Individual campus units retain responsibility for:

- New and replacement hardware for laptops and desktops, and mobile devices.
- Purchase of peripherals and special-order hardware.
- Purchase or lease of printers; Mcard-readers for printers; supplies including paper.
- Cost of repair for out-of-warranty hardware.
- Software licenses.
- Equipment and software for classrooms and conference rooms.
- Capital charges when adding capacity, coverage, or other upgrades for in-building network equipment.
- Annual charges for network operation (internet and campus backbone).
- Upgrade from 8x5 repair coverage to 24x7, for in-building network equipment.
- Desktop Backup (Crashplan) service.

Some features and services for MiWorkspace can be enhanced by agreement of ITS and individual units. Examples where these agreements may come with additional fees:

- Increased storage capacity.
- Additional hours of support.
- Additional services for students.

### Document Review & Approval

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Reviewed by</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage Description</td>
<td>Author(s)</td>
<td>Date</td>
</tr>
<tr>
<td>-------------------</td>
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</tr>
<tr>
<td>MiWorkspace for Central Administrative Units SLE copied to this document and ready to be modified</td>
<td>Phil Ray</td>
<td>10/31/2013</td>
</tr>
<tr>
<td>Draft for Campus Review</td>
<td>Terry Houser, Amy Wang</td>
<td>9/15/2014</td>
</tr>
<tr>
<td>New Version for Publication</td>
<td>Bob Jones</td>
<td>12/9/2014</td>
</tr>
</tbody>
</table>