

## Monthly Technology Maintenance Plan and Schedule

Technical Services (TS) will perform its scheduled monthly technology maintenance on the first or second Fridays of each month starting at 6:00 PM and ending at 6:00 AM the following morning. The monthly maintenance program is a preventive measure essential to providing stable and secure systems to the University.

### 2024 - 2025 Proposed TS Maintenance

Date	Status
June 3, 2024	Scheduled Maintenance
July 19, 2024	Scheduled Maintenance
August 9, 2024	Scheduled Maintenance
September 6, 2024	Scheduled Maintenance
October 4, 2024	Scheduled Maintenance
November 8, 2024	Scheduled Maintenance
December 13, 2024	Scheduled Maintenance
January 10, 2025	Scheduled Maintenance
February 7, 2025	Scheduled Maintenance
March 7, 2025	Scheduled Maintenance
April 4, 2025	Scheduled Maintenance
May 16, 2025	Blackout period: no major changes or maintenance until after May 14
June 6, 2025	Scheduled Maintenance

### Background

To provide the best possible service, TS must regularly update and perform routine maintenance on its systems and networks. Some of these activities require that the affected systems and networks shut down. While this work is essential, we also recognize that it presents an inconvenience. To enable those who use these systems to better plan for maintenance, we are establishing a new "Scheduled Monthly Maintenance Plan" for performing routine maintenance and upgrades to our services.

Periodic maintenance of IT systems is mandatory. Here are some of the reasons why:

- Security patches
- Hardware upgrades
- Software patches and upgrades
- Software and component installations
- Re-configurations
- Server reboots
- Availability and fail-over testing

Maintenance usually lasts four to six hours, but the whole 12-hour period is reserved. Many times, if a server is going to fail, it will happen during the reboots required during maintenance.

**Note:** Software patches, upgrades, and installations do not include any major changes to UAPB Records. These types of maintenance are planned and scheduled separately by the Technical Services.

## **Monthly Maintenance Plan**

The plan defines a single monthly time for maintenance across TS systems. Monthly maintenance is scheduled from 6:00 PM until 6:00 AM on the first Friday or second Friday of each month following Microsoft's Patch Tuesday schedule. Even though the maintenance period calls for 12 hours, interruptions to end-users are typically brief. During the week before maintenance, end-users will be notified via email of any major system outage. However, no notification will be sent for standard maintenance that only affects systems for short periods.

## **Justification**

The plan seeks to satisfy the following criteria:

Suitable vendor support since the availability of experienced engineers is significantly better during the day. Since risks and the resulting need for support are highest during maintenance procedures (e.g., system reboots, patch installation, and software upgrades), maintenance should be scheduled during daytime hours to minimize downtime.

Minimize service interruption to end-users. Although the maintenance is scheduled for a 12 hour time period, disruption to end-users is usually brief for the following reason.

- Maintenance on each individual server may last from five to 20 minutes on average. The plan schedules 12 hours due to the total number of servers being maintained.
- Identify an overall low network utilization period for maintenance
- Fridays usually show the least amount of activity.
- Sufficient time to complete maintenance and resolve problems when they occur.
- Avoid schedule conflicts with database and system backups. All system and database backups run during the evening and early morning hours.
- Avoid academic and administrative calendar conflicts. Scheduled maintenance for the first Friday or second Friday of the month usually avoids conflicts with most academic and administrative activities.
- A single consolidated maintenance period for all TS systems and networking. A single monthly maintenance period eliminates confusion for end-users, minimizes the number of service disruptions, and provides coordination for the TS infrastructure groups.

## **Unplanned Outages**

This plan does not exclude the need for an occasional unplanned outage. On rare occasions, security vulnerabilities or performance problems may necessitate unscheduled outages during normal work hours. Every effort will be made to inform the University of these outages ahead of time, and services will be restored as quickly as possible.

## **Maintenance Blackouts**

Exceptions to the maintenance schedule will be shown on the calendar as "Blackouts." During Blackout periods, no major changes or maintenance will be performed, except as required to respond to or prevent a system outage, service disruption, or emergency or for changes required to comply with business process changes for regulatory systems. These "Blackout" periods correspond to peak usage periods during the academic year (such as prior to or directly after the start of classes, finals, etc.).

Along with scheduled blackouts, there may be times when regularly scheduled maintenance must be canceled. Please contact Technical Services in advance if a cancellation is required. The cancellation request will be evaluated, and a final determination will be made as quickly as possible.

## **Questions?**

Please contact the Director of Technical Services, Willette Totten, at 870-575-4773 or [tottenw@uapb.edu](mailto:tottenw@uapb.edu) with any questions about this plan or the schedule.