

# 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.



## 2023- 2024 Technical Services Maintenance Schedule

Date	Status
July 7, 2023	Scheduled Maintenance
August 4, 2023	Scheduled Maintenance
September 15, 2023	Scheduled Maintenance
October 6, 2023	Scheduled Maintenance
November 3, 2023	Scheduled Maintenance
December 15, 2023	Scheduled Maintenance
January 12, 2024	Scheduled Maintenance
February 9, 2024	Scheduled Maintenance
March 8, 2024	Scheduled Maintenance
April 5, 2024	Scheduled Maintenance
May 17, 2024	Blackout period: no major changes or maintenance until after May 15
June 7, 2024	Scheduled Maintenance
July 12, 2024	Scheduled Maintenance

## **Background**

TS must regularly update and perform routine maintenance on its systems and networks to provide the best possible service. Some of these activities require that the affected systems and networks shut down. While this work is essential, we also recognize that it is inconvenient. 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 anywhere from 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, a requirement during maintenance.

**Note:** Software patches, upgrades, and installations do not include 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 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 significant system outage. However, no notification will be sent for standard maintenance that only affects systems for short periods of time.

#### **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 is 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 12 hours, disruption to end-users is usually brief for the following reasons.

- Each server's maintenance may last from five to 20 minutes on average. The plan schedules 12 hours due to the total number of maintained servers.
- Identify an overall low network utilization period for maintenance
- Fridays usually show the least 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 or second Friday of the month usually avoids conflicts with most academic and administrative activities.
- All TS systems and networking have a single consolidated maintenance period. 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 before or directly after the start of classes, finals, etc.)

Along with scheduled blackouts, there may be times when the 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 get in touch with the Director of Technical Services, Willette Totten, at 870-575-4773 or tottenw@uapb.edu with any questions about this plan or the schedule.