# 7. APPENDIX D – OPERATING SYSTEM PATCHING DETAILS

### **PSC PaaS Standard Server Patching**

The Purdue Systems Cloud Windows and Linux PaaS service includes standard Microsoft operating system patches and non-kernel Linux patches monthly. Linux kernel patching is conducted twice per year.

#### **Customer Expectations:**

Customers are expected to use the time allocated between non-production and production patching to thoroughly test applications and ensure all functionality within the applications. Testing helps significantly reduce the risk of production errors due to changes made by operating system level patching. For applications that do not automatically recover from a system restart, the Application Administrator is responsible for stopping or starting appropriate services. If any post-patching issues are encountered, please contact the Operating System Team immediately for a resolution or exception prior to production patching.

#### PaaS Windows Patching Process and Schedule:

Microsoft Patch Tuesday is defined as the second Tuesday of each month. The below schedule was created to allow adequate testing time for Application Administrators between non-production and production patching. All patching requires one or more system reboots.

- Non-Production Windows Server Patching
  - o The Maintenance windows starts at 4PM on Thursday, following Patch Tuesday and ends at 7AM the next morning.
- Non-Production Windows Server Patching Cleanup
  - o Servers that failed to install any patches will be patched again
  - The Maintenance windows starts at 4PM on the Saturday following Patch Tuesday and goes through 7AM the next morning.
- Production Windows Server Patching
  - o The maintenance window starts at 4PM on the second Saturday, following Patch Tuesday and ends at 7AM the next morning.
- Production Windows Server Patching Cleanup
  - o Servers that failed to install any patches will be patched again
  - The maintenance window starts at 4PM on the third Saturday, following Patch Tuesday and ends at 7AM the next morning.
- Emergency Patching
  - When a Windows patch is deemed critical by the Purdue Systems Security Team, the patching schedule may be altered with short notice. In these cases, the Operating Systems Team will email customers with an updated patching schedule. We will provide as much notice as possible and request feedback for timing issues.

For adjustments of timing for special application service needs within the above maintenance windows, email <a href="mailto:platform-win@purdue.edu">platform-win@purdue.edu</a> with an exception request.

A Microsoft Excel version of the patching schedule with dates of the month can be provided upon request.

## PaaS Linux Patching Process and Schedule:

The below schedule was created to allow adequate testing time for Application Administrators between non-production and production patching.

- Non-Production system non-kernel patches are installed between 12AM and 5AM on the 2<sup>nd</sup> of each month for Linux servers. System reboots are not required.
- Production system non-kernel patches are installed between 12AM and 5AM on the 21<sup>st</sup> of each month for Linux servers. System reboots are not required.
- Kernel patches are installed twice per year. Dates and exact timing are coordinated with customers a month prior to the exercise. System reboots are required.
- Emergency Patching
  - When a Linux patch is deemed highly critical by the Purdue Systems Security Team, the patching schedule may be altered with short notice. In these cases, the Operating Systems Team will email customers with an updated patching schedule. We will provide as much notice as possible and request feedback on timing issues.

For adjustments of timing for special application service needs within the above maintenance windows, email <a href="mailto:platform-unix@purdue.edu">platform-unix@purdue.edu</a> with an exception request.