

SERVICE LEVEL AGREEMENT			
This is a controlled document			
Description	Service Level Agreement for Computing Services		
	Foundation Agreement on which all SLA/OLAs are based.		
Purpose	This document outlines the service levels, responsibilities and terms and conditions related to all base IT Services		
Supersedes	N/A		
Document Owner	Computing Service Level Manager	Owner Org	<i>Computing</i>
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VERSION HISTORY				
Version	Date	Author(s)	Approved by (if needed)	Change Summary
V0.9	02/25/2010	Robert D. Kennedy		Draft
V1.0	10/04/2010	Robert D. Kennedy		Uniform v1.0 Drafts
V2.0	2/8/2012	Jack Schmidt		Updated Sector information
V3.0	7/21/2012	Jack Schmidt		Conversion to template; removed Remedy references; removed VIP users-in SD SLA

VERSION HISTORY				
Version	Date	Author(s)	Approved by (if needed)	Change Summary
V3.1	11/12/2012	Jack Schmidt		Removed signature section, added standard support disclaimer, added Service Offering report information
V3.2	10/15/2013	Brian McKittrick		<p>1.1 – Modified normal operations statement to include suspension of SLAs during continuity situations.</p> <p>1.2 - Added statement to defer requests if an interruption of service is needed.</p> <p>4 / 5 - Updated security statement and service request procedures to reflect reality.</p> <p>5.5 - Updated Service Breach procedure to accurately reflect handling process.</p> <p>Throughout - Corrected and updated grammar where needed.</p>
V3.3	September 2014	Brian McKittrick		Yearly Review -Corrected DocD number on page header.

VERSION HISTORY				
Version	Date	Author(s)	Approved by (if needed)	Change Summary
				-Updated Version history table -Section 5.1 – Removed CS and reference to servicenow.
V4.0	April 2015	Brian McKittrick		-Complete document restructure which incorporates ServiceNow data, Capacity, Availability and Business Impact information. Minor updates also include: -Updated header table -Updated version history table -Reorganized all sections for ease of reading -Removed the word 'Sector' -Updated Request State for Fuji Release -Added 12 hour incident response for off-hours to support availability -Added target for 90% Availability 8 x 5
V4.1	October 2016	Brian McKittrick		-Yearly Review -fixed typos
4.2	October 2017	Brian McKittrick		Yearly review. No changes.
4.2	August 2018	Brian McKittrick		-Yearly Review

VERSION HISTORY				
Version	Date	Author(s)	Approved by (if needed)	Change Summary
				-Added Business Service in relation to Service Offering -Removed reference to TSW -Added Service Dependency Document to related documents section.
4.3	August 2019	Brian McKittrick		Updated escalation and requirement guidance
4.4	October 2020	Brian McKittrick	CHG000000018161	Minor wording updates. No changes in scope or intent.

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1 INTRODUCTION

EXECUTIVE SUMMARY

This document collects the definitions and common expectations for the services provided by Computing. The Foundation SLA has several objectives:

- Set common service expectations and targets with minimal document repetition
- Along with the service specific Service Catalog Document, define the service:
 - Responsibilities of the Service Owner/Customer(s) and Users
 - Service Levels, Capacity Units and Availability targets
 - Service Commitments
 - Service Support and Service breach procedures
 - computer security responsibilities
 - specific terms and conditions

The service levels defined in this agreement, and specific Service Catalog documents, are in effect during normal operations, in the case of a continuity situation they may change or be suspended.

2 SERVICE SUPPORT PROCEDURE

REQUESTING SERVICE SUPPORT

Access to all Computing services may be requested through the Service Desk, via the Service Management Application suite, servicedesk.fnal.gov or by phone (630-840-2345). More information about requesting service can be found in the Self Service at servicedesk.fnal.gov.

STANDARD SERVICE SUPPORT HOURS

Monday through Friday, 8am – 5pm U.S. Central Time, not including Fermilab work holidays.

SUPPORT DETAILS

A **Critical Incident** is the highest priority incident, one in which a highly visible and important service is no longer operable and there is no acceptable work-around. The exact definition of what constitutes a critical incident may be clarified by each service.

To ensure that the Critical Incidents receive the proper level attention, please report any Critical incidents to the Service Desk (630-840-2345).

Computer security incidents always qualify for Off-Hours critical incident response. Suspected Computer Security Incidents should be reported by calling the Service Desk (630-840-2345), option 2. More information regarding Computer Security can be found at <http://security.fnal.gov>.

OFF-HOURS SUPPORT

While many Computing services will offer some form of Off-Hours support, not all do. Please see the appropriate Service Catalog document for definition and service levels agreement for details. Critical incidents always qualify for Off-Hours support.

SUPPORT DETAILS

Off-Hours support is provided via phone (630-840-2345) for critical incidents only. Off-Hours paging of service experts currently requires this phone call approach to report an incident. Individual services may have a specific definition of what other incidents qualify for off-hours versus the next business day response.

SPECIAL SUPPORT COVERAGE

Requests for changed in support coverage can be made by opening a request with the service desk a minimum of seven (7) days before the coverage change is needed.

2 SERVICE OVERVIEW

SERVICE STRUCTURE

Services at Fermilab are organized as Service Areas, Business Services / Service Offerings. Service Areas are a logical grouping of Services. Business Services/Service Offerings provide outcomes needed by lab. Each Service area will have a Service Owner and, where applicable, a named customer. The attributes of each service are documented in each Service Catalog Document.

The Services offered by Computing are documented in:

- The Service Catalog, which is available in the Service Management Application
- Service specific Service Catalog Document, which is available in CS DocDB

Business Services/Service Offerings can be classified as:

- Customer Facing Service – Consumed by the Fermilab community
- Internal Only Service – Consumed by Computing

SERVICE DOCUMENTS

Each Service Area will maintain a 'Service Catalog Document', which when paired with the Computing Foundation SLA, form the 'Service Agreement.'

The Service Document contains information, if applicable, such as Capacity thresholds, Service Continuity procedures and Service Availability targets and definitions.

CUSTOMER, SERVICE OWNER, AND USER ROLES

The **Customer** is the recipient of a service, typically the role that negotiates and pays for a service on behalf of Users. For the purposes of this document, Customer usually refers to the organization which requests and receives a service for its members.

The **Service Owner** is responsible for delivering and supporting a service for Users. The Service Owner is also responsible for maintaining any Service Documents as required by the Service Management System Plan.

The **User** is typically an individual within a Customer organization who uses the service on a regular basis. A User, however, may also provide a service maintained by the Customer such as a data reconstruction service which uses the Provider's service for its own implementation.

3 BUSINESS REQUIREMENTS, SERVICE ENTITLEMENT AND COST

3.1 Business Requirements

Business requirements and priorities, are the primary input for Service Design. During the annual budgeting process, requirements are reviewed and aggregated so that services may plan adequately to meet business needs. Additional inputs to the planning process include Computing Capacity plans, Business Impact assessments and Continuity of Operations documents.

3.2 Service Entitlement

Employees, contractors and visitors who have a formal relationship with Fermilab, are entitled to use Computing Services. The use of services may require permissions, which require approvals. Computing may elect to restrict or revoke the use of a Computing Service at any time. As each service is unique, there may be further information available on entitlement described in the Service Catalog Document.

3.3 Service Charging Policy

While the costs of many Computing Services are not charged back to Customer/Users, some services may use a charge-back costing model, as agreed with the Customer.

Some services have developed chargeback costing models for elements of their service, on a unit cost basis. Most notably this has been done for

- Virtual Servers
- Scientific Data Storage – tape library slot usage

In other cases it has been documented that it is the customer's responsibility to provide funding for the infrastructure needed by that customer, while using a service provided by Computing. Most notably this is done for scientific customers using

1. Database Service
2. Computation Farms

The activities of Service charging are governed by Financial Management for IT Services policy, process and procedures (DocDB#4112)

4 SERVICE CAPACITY

Since each service is unique, the details are captured in each Service Catalog Document. The following Capacity types are considered for each Service Offering.

Business Capacity Management: The objective is to translate business needs and plans into capacity and performance requirements for Computing services and infrastructure, and to ensure that future capacity and performance needs can be fulfilled.

Service Capacity Management: The objective is to manage, control and predict the performance and capacity of operational services. This includes initiating proactive and reactive action to ensure that the performances and capacities of services meet their agreed targets.

Component Capacity Management: The objective is to manage, control and predict the performance, utilization and capacity of IT resources and individual IT components.

5 SERVICE COMMITMENTS

Service levels and commitments, when applied in the context of a Service, are a guarantee to the customer that the service is available when needed and fixed timely when not usable.

All of the commitment tables below detail the minimum service commitments for services provided by computing.

INCIDENT AND REQUEST PRIORITIES

The **Priority** for incidents (something is broken) and requests (something is needed) is determined by a combination of the **Impact** and the **Urgency**. The Impact is driven by how many people are affected, and whether there is a serious business or financial loss at risk. The Urgency is driven by whether the user can do other tasks or use a work-around for a time, or whether a time-critical task is blocked. The priority determines the Service response and restoration targets.

The priority assigned any ticket may be re-adjusted by service personnel after consultation with the user.

The table below provides priority guidelines.

Impact and Urgency Guidelines				
	Critical	High	Medium	Low
Ugency	Based on event	Required	Important	Desireable
Impact	Extensive/Widespread	Significant/Large	Moderate/Limited	Minor/Localized

SERVICE RESTORATION AND TARGETS

An **Incident** is any event, not part of the standard operation of a service, which causes, or may cause, an interruption to, or a reduction in the quality of that service. Service Restoration is the action of resolving an incident permanently or via an acceptable workaround.

The table below is the minimum baseline for all Computing Services. The specific Service Catalog Document may describe a different threshold based on the business requirements of the service.

Computing Foundation Commitments				
Incident	Critical	High	Medium	Low
90% - Respond within	1 hour	4 hours	8 hours	8 hours
90% - Resolve within	5 hours	2 days	4 days	7 days
	<i>Clock Hours</i>	<i>Business Hours</i>		

A **Critical Incident** is the highest priority incident, one in which a highly visible and important service is no longer operable and there is no acceptable work-around. The exact definition of what constitutes a critical incident may be clarified by each service.

SERVICE REQUEST FULFILLMENT

A **Request**, in a service management context, is a request for information, a standardized change to a service or access to a service. Unlike an incident, a request usually does not involve the interruption or threat of interruption of an already provisioned service.

Each service, within its Service Catalog document, may define Standard requests which are available in the Service Management Application Suite. Each standard request may have further defined fulfillment targets.

Since restoring established services takes precedence over provisioning new services, service restoration tends to be treated with greater urgency than request fulfillment.

Should the execution of a request either require an interruption or represent a significant risk to an already provisioned service, computing, in conjunction with the Service Provider, may elect to defer the delivery of the request to the next scheduled maintenance window for the service.

The table below is the minimum baseline for all Computing Services. The specific Service Catalog Document may describe a different threshold based on the business requirements of the service.

Computing Foundation Commitments				
Request	Critical	High	Medium	Low
90% -Respond within	1 hour	4 hours	8 hours	8 hours
	<i>Clock Hours</i>	<i>Business Hours</i>		

SUPPORT AND SERVICE AVAILABILITY

Support Availability documents the hours in which a service provider will respond to and triage an incident or request.

The following are default definitions for Support Availability hours to encourage uniformity:

- **Standard Business Hours:** Monday through Friday, 8am – 5pm U.S. Central Time, not including Fermilab work holidays.
- **Daily Enhanced:** Every day, 8am – 8pm U.S. Central Time, including Fermilab work holidays. The response time however may be slower on weekends and Fermilab work holidays, which should be clarified by those services offering this support.
- **24 X 7:** Every day, all of the time. The response time however may be slower on weekends and Fermilab work holidays, which should be clarified by those services offering this support.
- **Enhanced Off-hours Incident response:** An incident will be acknowledged during non-business hours within 12 hours of being submitted. This is not a standard scheduled and must be negotiated per service offering.

The table below is the minimum baseline for all Computing Services. The specific Service Catalog Document may describe a different threshold based on the business requirements of the service.

Computing Foundation Commitments				
Support Availability	Critical	High	Medium	Low
Staff Available	24 X 7	Monday through Friday, 8am – 5pm U.S. Central Time, not including Fermilab work holidays.		
	<i>Clock Hours</i>	<i>Business Hours</i>		

Service Availability provides assurance that the service is usable when expected. System availability is measured as an uptime percentage during the expected service availability window (e.g. 99.5% Availability 24 X 7). Service availability should be set realistically, based on the implementation of all components of service offering.

An Outage implies system unavailability and negatively impacts availability measurements. An Outage during an 'agreed to maintenance window' does not impact the availability measurement.

For applicable Service Offerings the following will be defined in each Service Catalog Document:

- **Maintenance Window** – a negotiated pre-approved down time to perform system maintenance.
- **Degradation** – Symptoms or threshold where service users are impacted, but users can continue using the service with an acceptable workaround.
- **Outage** – The service is not available as expected.

The table below is the minimum baseline for all Computing Services. The specific Service Catalog Document may describe a threshold based on business requirements.

Computing Foundation Commitments		
Service Availability		
Service Usable	95%	defined based availability of the service
	<i>Uptime</i>	<i>Schedule</i>

Service Offerings with 24x7 components

There may be components of a service offering that are available for 24 x 7 support. These components are negotiated and are tracked accordingly.

Service Continuity

Service Continuity ensures that services can meet essential business functions under all circumstances. Service Continuity planning and procedures assist Service Owners with managing risks that could seriously impact services. Where applicable, Services will define a Recovery Time Objective and a Recovery Point Objective in the Service Catalog Document.

Recovery Time Objective: The length of time business processes could be unavailable before the downtime adversely impacts business operations

Recovery Point Objective: The maximum interval of data loss since the last backup that can be tolerated and still resume the business process.

5 RESPONSIBILITIES

The responsibilities below are a minimum for all computing services. Each Service Catalog document may include additional Service Owner and Customer responsibilities.

The Customer, Users, and Service Providers are expected to abide by applicable Fermilab policies, including but not limited to:

- [Fermilab Policy on Computing](#)
- [Guidelines for Incidental Computer Usage](#)

SERVICE OWNER RESPONSIBILITIES

- Providing a secure service using Computer Security policies and guidelines
- Deliver a quality service that meets the commitments detailed in this document and the unique Service Catalog Document
- Monitor performance results and initiate improvements as needed. This includes availability and response targets.
- Communicate and gain agreement on planned outages outside of the published service maintenance window.

CUSTOMER RESPONSIBILITIES

- Participate in the modification of Services by providing requirements and desired outcomes.
- Reasonable availability of customer representative(s) when resolving a related incident or request.

6 LIFECYCLE MANAGEMENT CONTEXT

The Computing Sector manages the lifecycle of Services through developing and executing Strategic and Tactical plans. The high level phases of the Service Lifecycle are summarized below.

Plan

The Service Owner writes the plan based on input from lab and internal computing customers, management direction, industry best practices and capabilities.

Purchase

The Service Owner, during the execution of the plan, will generate the necessary requisitions to purchase the necessary items.

Deploy

The Service Owner, in implementing the plan, will deploy/subscribe to the new hardware and software, replacing end-of-life systems and applications

Manage

The Service Owner will manage and maintain the operational integrity of the components required to maintain the service to the customer. This includes implementing/coordinating repairs, upgrades and replacements as necessary.

Retire/Replace

The Service Owner, as part of executing plan, will retire end-of-life services with input from the Customer.

7 Managing Computing Needs

There are some tools available to assist customers when there are challenges with Computing Services.

- [Service Management SharePoint Site](#)
- [Service Management Application](#)
- Providing Feedback (from within the Service Management application suite Servicedesk.fnal.gov)

Incident/Request Escalation

In the event that an issue needs escalations, the following guideline should be used.

- Incident Manager or Service Desk
- Service Level Manager
- Service Manager

8 CUSTOMER REQUESTS FOR SERVICE ENHANCEMENT

Customers can request Service Enhancements by opening a request for the Service Owner. The Service Owner will work with the Customer to prioritize and track progress.

9 SERVICE MEASURES AND REPORTING

The Service Offering dashboard is available in the Service Management Application Suite. The dashboard measures each offering for each service against the response, resolution and availability targets as defined. The dashboard shows performance trending for the Service Offerings on a weekly/monthly/yearly basis.

The Service Offering dashboard is available to Service Owners and Providers, Business Analysts, Process Owners, Senior IT Management and designated customer representatives.

Service Level breaches are identified in the service offering dashboard and are monitored by the Service Owners, Incident Manager and Service Level Manager.

10 SERVICE BREACH PROCEDURES

Breaches in service are defined as not meeting agreed to commitments over a month's time. Breaches are recorded, classified and reviewed on a monthly basis utilizing the Service Level Management process. Breaches and opportunities for improvement are available on the Monthly Service Performance Report.

11 RELATED DOCUMENTS

Computing Documents

Service Management System Plan

Rollup SLA

Service Specific Operational Level Agreement

Computing Capacity Management Plan(s)

Computing Continuity Plan

Service Documents

Service Catalog Document

Service Dependency Document

Annual Risk Assessment

12 KEY DEFINITIONS BY TOPIC

Many of the definitions below come from ITIL, a body of best practices in IT Service Management. For more ITIL terminology, please refer to [this online glossary](#).

SERVICES

SERVICES (AT FERMILAB) - A means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks. Providing a service includes the packaging of technology, information, people and process that support capabilities or user activities.

SERVICE RESTORATION

Incident Response Time is measured from when the ticket is entered into the Service Management Application (by the user or the Service Desk personnel) to when the ticket status is set to "Work in progress". This is the amount of time required to acknowledge the ticket. Time is only counted during the on-hours support period for a service.

Service Restoration refers to the resolution of an Incident. Restoration of a service is judged from the user view of the service that is delivered. An incident is resolved by

either the provider solving the underlying error in the service or the provider delivering an acceptable work-around to the user while the underlying error is investigated. A service is restored so long as the user may continue to do their work which depends upon that service.

Incident Resolution Time is measured from when the ticket is entered into the Service Management Application (by the user or the Service Desk personnel) to when the ticket status is set to “resolved”. Time spent in the “pending customer” state is not included in the resolution time. If a ticket is re-opened, then time continues to be counted until the ticket is again set to “resolved”. Time is only counted during the on-hours support period for a service. This reflects the amount of time required to resolve, but not necessarily close, the ticket. Resolution means that a service is restored. . After resolution, as a separate step, the user is asked via email whether the resolution is satisfactory and if the ticket may be closed.

SERVICE REQUEST FULFILLMENT

Request Response Time is measured from when the ticket is entered into the Service Management Application (by the user or the Service Desk personnel) to when the ticket status is set to “Acknowledged”. This is the amount of time required to acknowledge the ticket. Time is only counted during the on-hours support period for a service.

Request Fulfillment refers to the fulfillment of a Request, which occurs when the requested information is delivered, the requested change is made in the production system, or the requested access to a service is made available to the user.

Request Resolution Time is measured from when the ticket is entered into the Service Management Application (by the user or the Service Desk personnel) to when the ticket status is set to “Closed” in the tool. Time spent in the “pending customer” state is not included in the resolution time. Time is only counted during business hours.