The Planetary Data System

Information Technology Security Plan for The Planetary Data System Nodes

(DRAFT)

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1. Introduction

1.1 PDS Overview

The Planetary Data System (PDS) is an archive of data products from NASA planetary missions, which is sponsored by NASA's Science Mission Directorate. The project actively manages the archive to maximize its usefulness, and it has become a basic resource for scientists around the world.

PDS is a federation of ten teams geographically distributed around the U.S. Six are science discipline nodes, focusing on Atmospheres, Geosciences, Imaging, Planetary Plasma Interactions, Rings and Small Bodies. There are two support nodes: the Engineering Node and the Navigation and Ancillary Information Facility Node. Additionally, PDS includes two special functions supported by a Radio Science specialist and a User-Centered Design team. Several of the nodes have "sub-nodes" to help with a specific aspect of the node's discipline. Several of the nodes oversee one or more data nodes, established for a short period of time to deliver a specific data collection to the PDS.

The following diagram shows the organization relationships among the Nodes, Subnodes, and Data Nodes, and the institutions at which they are located.
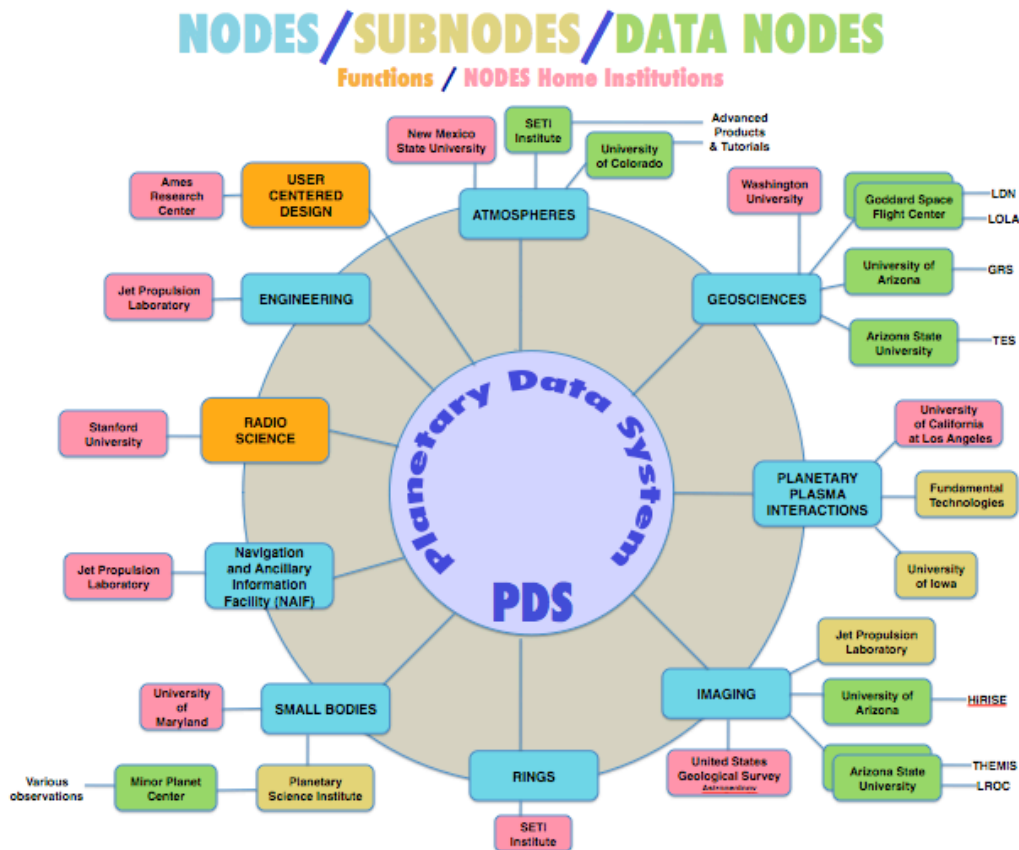
1.2 Document Scope

This document is the general Information Technology Security Plan for the PDS. It does not contain specific IT security procedures given the distributed nature of the PDS.

2.   PDS IT Security Plan Collection

The objectives of PDS Information Technology (IT) security planning are to identify, assess and mitigate risks to PDS overall system, data and information assets. PDS must protect its technology resources and data from a wide range of threats to ensure continuous operations and minimize operational risks.

Given the distributed and federated organizational structure of PDS, each node is independent and maintains separate security policies and procedures relating to their environment. Each Node is responsible for developing its own IT security plan that describes the systems and procedures required to mitigate risks and address any compromises in the system.

As a result, the overall PDS IT security plan is a collection of the following set of internal IT security plans from each of the principal nodes:

Atmospheres Node, New Mexico State University, IT Security Plan

Engineering Node, Jet Propulsion Laboratory, IT Security Plan

Geosciences Node, Washington University, IT Security Plan

Imaging Node, United States Geological Survey, Flagstaff, IT Security Plan

PPI Node, University of California, Los Angeles, IT Security Plan

Rings Node, Search for Extraterrestrial Intelligence, IT Security Plan

Small Bodies Node, University of Maryland, IT Security Plan

Each node has ownership of their PDS IT Security Plan. Each plan was developed in accordance with the guidelines given in the PDS IT Security Plan Template to ensure PDS information resources and assets are protected from cyber attacked and to help correct vulnerabilities.

The collection of PDS IT Security plans are for PDS internal use and are restricted to PDS access only. For IT Security related questions and information, please contact each node's manager directly (https://pds.nasa.gov/contact/contact.shtml).