

## Introduction

This document presents a conceptual model of the vPlants Metadata Template.

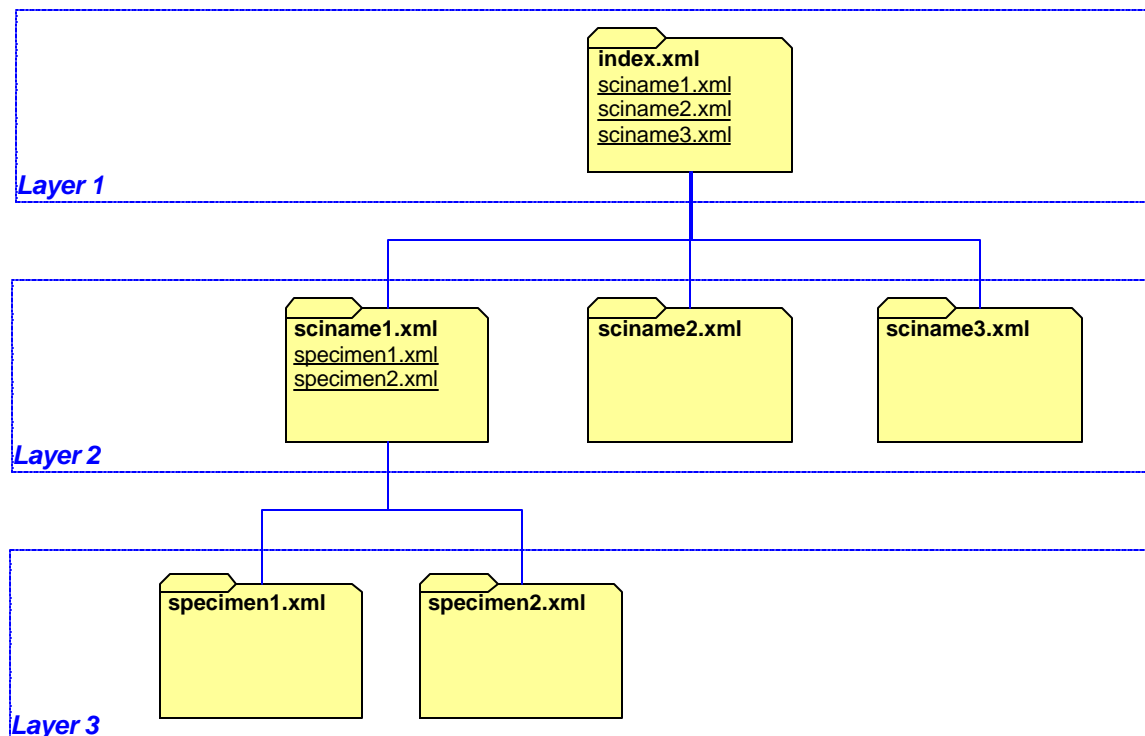
Metadata will be published on the Internet by each participating vPlants institution. A special web agent or 'robot' will gather the metadata on a regularly scheduled basis and store it in the portals search engine.

The goal of this template is to present metadata that can be efficiently located, gathered, and stored by the portal's robot. Strategies for achieving this goal include the following:

- Limit the number of metadata fields.
- Provide fields that allow the robot to skip or bypass unmodified data.

## Metadata Template - Conceptual Design

The metadata template proposed in this document consists of 3 hierarchical layers of XML documents, each described by it's own XML Schema. Schema's formally describe XML file formats, providing the vocabulary and allowable structure of the elements in an XML document. The template is depicted in the following diagram:



Layer 1 serves as a starting point or table of contents for the sites metadata, guiding the portal's robot to the metadata in Layer 2 via uniform resource indentifiers (URI) sometimes refered to as hyperlinks.

Layer 2 documents are keyed by the institution's currently accepted scientific names; one document for each unique scientific name. Common names, vPlants' taxon ID's, and specimen ID's are associated with each name. Speciment ID's will display a "last modified" timestamp and URI to their detailed specimen document in Layer 3. Before visiting the detailed document, the robot will analyze the timestamp to determine if the document's data has been modified since it's last visit.

Layer 3 documents are keyed by a unique specimen ID; one document for each unique specimen ID. Detailed specimen information such as collectors, site location, and annotations are provided in the document.