Team Modeler Capsule Specification

Purpose

This Capsule provides a starting point for applications that need to handle structures involving organizations, teams, people and roles.

Functionality

The structure capsule supports the object model depicted in Appendix A. Examples of usage are described in Appendix B. The capsule provides tools or methods for:

- Installing a federated database with a preloaded schema and at least one template database.

- Creating, updating and deleting (optionally) named, hashable and/or indexed instances of each of the object classes and the ability to link instances to other instances.

- Adjusting the placement model (segmentation into databases, containers and object clusters).

- Finding instances by name or key and querying or iterating over all instances of a class. The latter methods are automatically generated during schema definition.

- At least the following kinds of relationships will be supported:

  - Relating one or many Persons to one or many Roles (who does what?).

  - Relating Roles to one another (role reporting structure).

  - Relating Organizations to one another (corporate hierarchy).

  - Relating Person objects to one another (line management hierarchy).

  - Relating a Person to one or more Organization (department) instances as the Manager.

- The Structure Capsule will be used to support the above functionality plus:
  - Transitive closure
  - Loop avoidance.
  - Path finding
  - Deep copy

- *To Be Determined:* A GUI, such as an ooAssist plugin, supporting the above functionality.

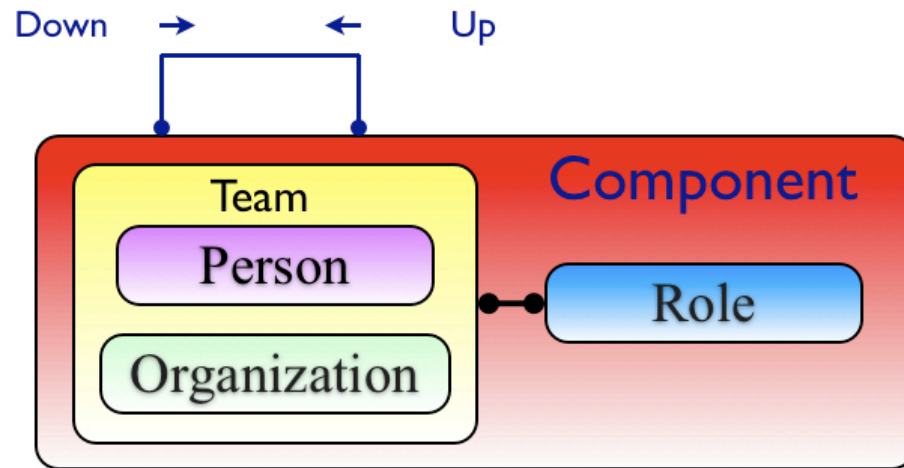- There will be no versioning/history capability. This may be provided in a separate capsule.

Platforms and Languages

- C++, Java and C# (later) on Windows and Linux.

Suggested Pricing

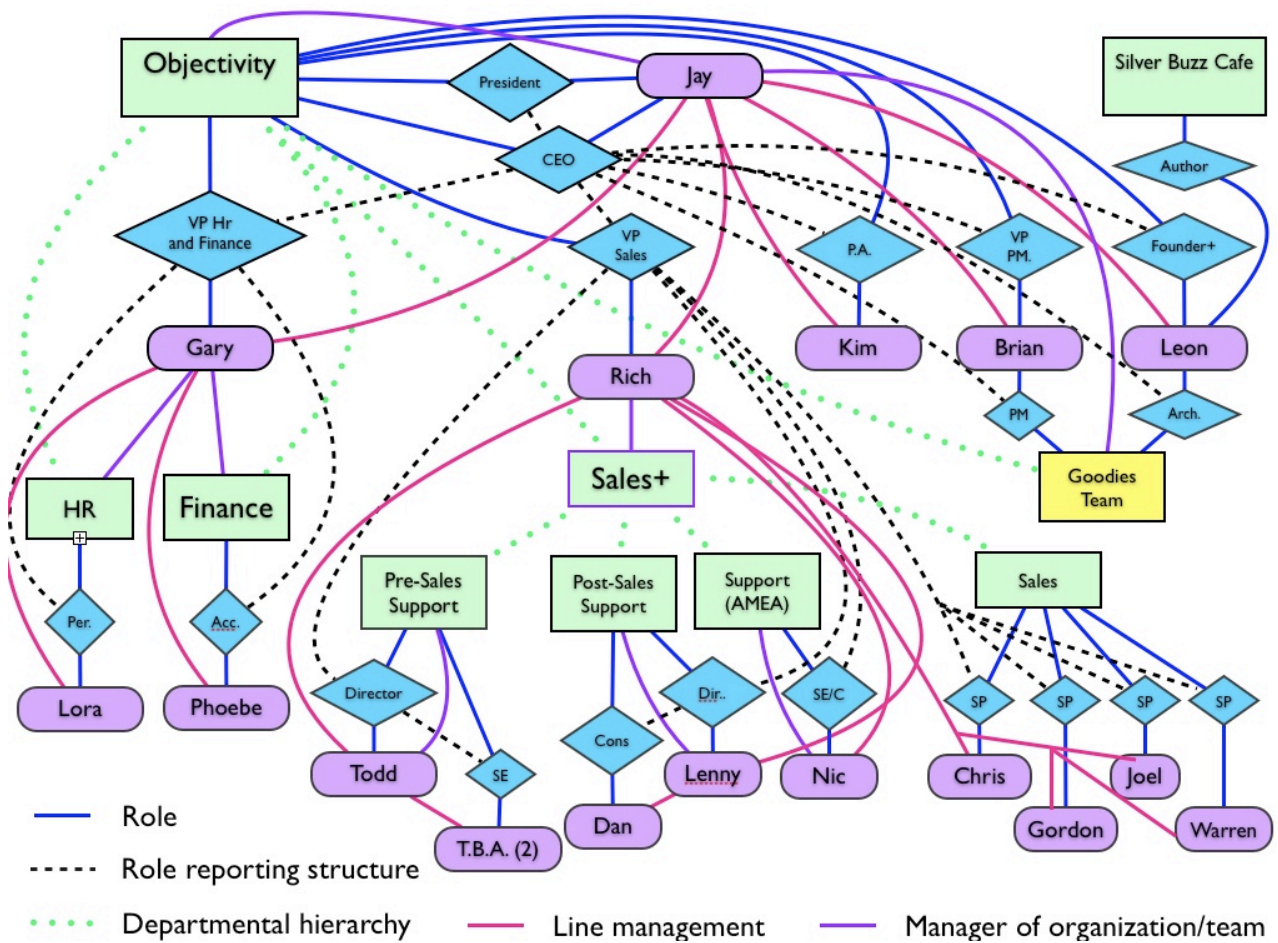- 60-day trial, then a one-time license fee of $250 per developer.

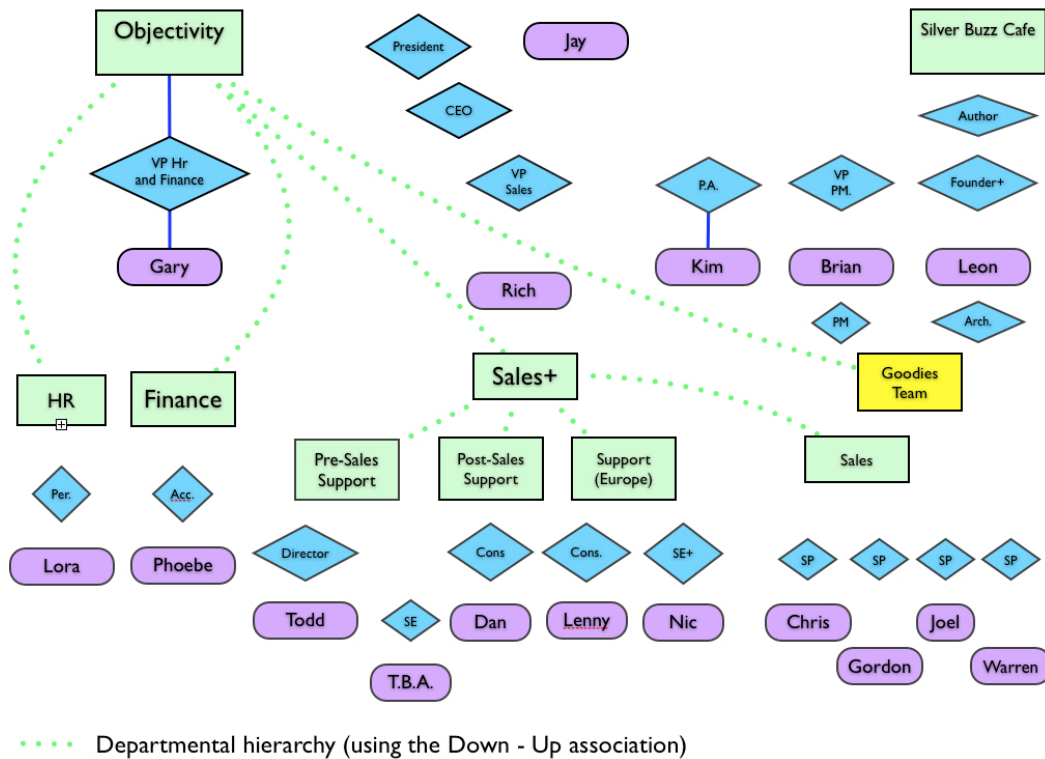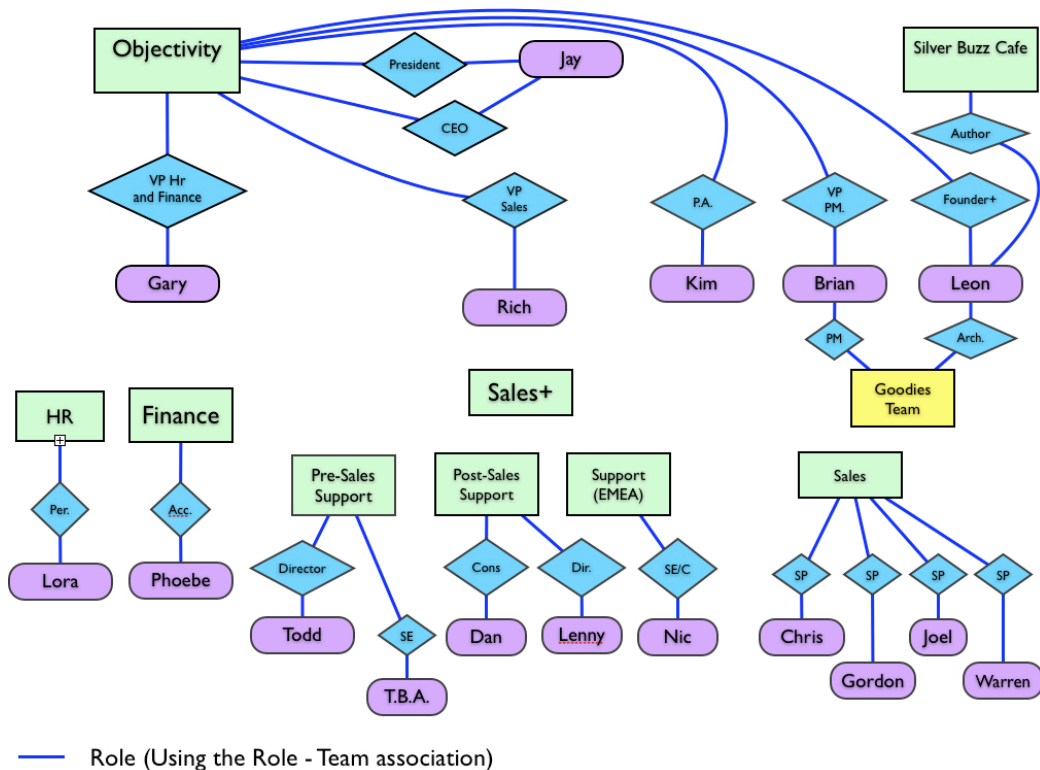## Appendix A – Object Model for the Team Modeler Capsule

- Team and Role inherit from the *Structure Capsule* Component class.
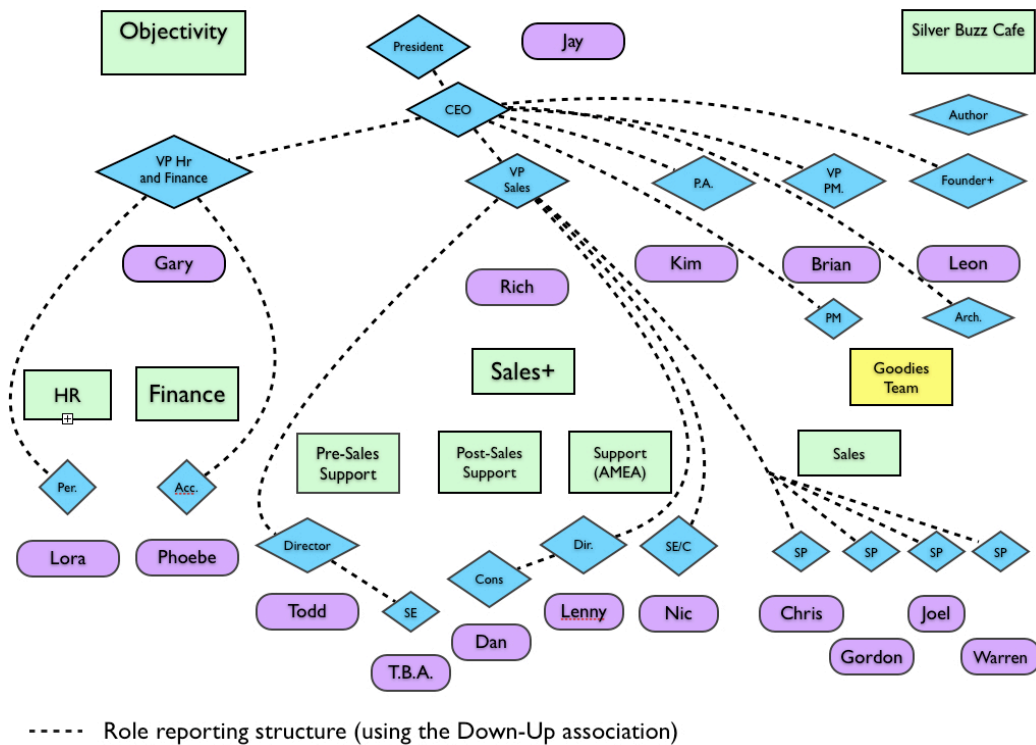- Person and Organization inherit from Team

Appendix B – Usage Examples for the Team Modeler Capsule

Example 1 - Overview (split out in subsequent examples).

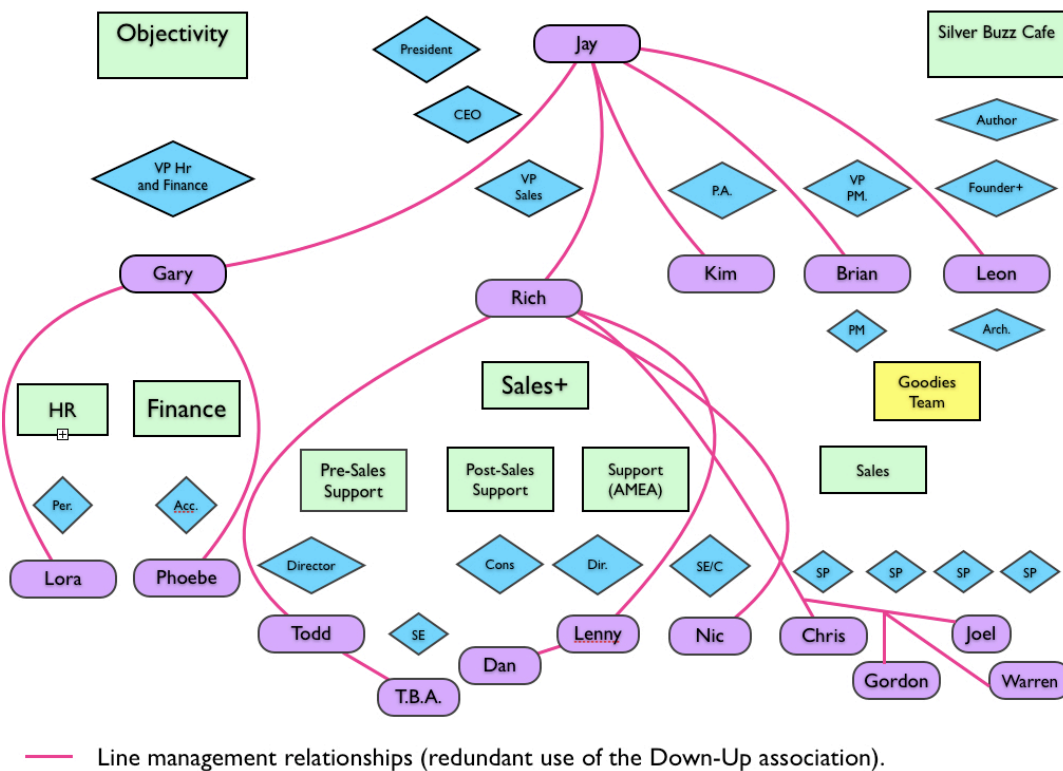**Example 2 - Departmental Hierarchy (using the Down-Up association between Organizations).**

Departmental hierarchy (using the Down - Up association)

Example 3 - Roles (using the Role to Team association).

Role (Using the Role - Team association)

Example 4 - Role Reporting structure (using the Down-Up association between Roles).

- - - - - Role reporting structure (using the Down-Up association)

Example 5 - Line Management (redundant use of the Down-Up association between Persons).

——— Line management relationships (redundant use of the Down-Up association).

Example 6 - Management (redundant use of the Down-Up association between Person and Team).

—— Manager of organization/team (redundant use of the Down-Up association).