Pinnacle, developed by Actual Systems UK, is a complete inventory system for salvage yards. Pinnacle provides salvage yards with control over receiving, pricing, inventory, and sales of used auto parts. Actual Systems is currently developing a new Java based product, Pinnacle Professional, which will provide the basic functionality of the original Pinnacle product using a modern three tier client-server architecture.

PHASE 1: REQUIREMENTS PROCESS

- Customer Needs
- Requirements Development
- Requirements Refinement
- Prototype Screens
- Technology Research

PHASE 2: DEVELOPMENT PROCESS

- Develop Test Plan
- Redesign
- Implementation
- Testing
- Draft User Manual
- Maintenance
- Technology Research

PROJECT STATUS

The following describes the project status at the time of delivery:

- Three releases designed, coded and tested:
  - Route/Carrier Service creation and maintenance
  - Scheduling and sequencing of deliveries
  - Report generation and printing
- Creation of user documentation for training purposes
- External Integrated Module:
  - FedEx Express implementation
  - API specification for integration of third party external carrier services

FURTHER DEVELOPMENT

The following describes further development work that needs to be done on the project after delivery:

- Implement additional functionality based on the legacy system:
  - Manifest printing/viewing
  - Delivery confirmation
- Finalize GUI
- Implement additional external carriers using the provided API

HIGH-LEVEL REQUIREMENTS

Develop the routing module for a new Java-based implementation of the Pinnacle system:

- Incorporate two shipping methods from the original Pinnacle system:
  - Internal routing using the yards’ own trucks
  - External/manual using external carriers (such as FedEx, UPS and DHL)
- Incorporate an additional shipping method:
  - External/integrated using web-services provided by external carriers to obtain pricing information and tracking numbers for shipments
- Perform acceptance testing against the legacy implementation to ensure correct functionality of the new implementation
- Provide a complete user manual documenting full shipping & delivery functionality
- Provide a general API for the inclusion of additional external integrated carriers

TECHNOLOGICAL CONSTRAINTS

At the request of Actual Systems, the team utilized the following tools:

- J2EE for the development of the overall routing module
- PostgreSQL Database for data storage
- Middleware for the generation of session beans
- Xdoclet for the generation of deployment scripts
- JBOSS for the creation of an Application Server
- ANT for batch generation of Enterprise Java Beans
- JUnit for automated unit testing of all classes written by the team
- JasperReports for the generation and printing of summary data