Software Handover Process

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Ideal Scenario

- Planning
- Presentation
- Training
- Build / Run Exercise
- Support MOU
Planning

• Assign Support / Expertise for handover process (both sides)
• Identify Handover Materials (Designs, ICDs, as-built updates, etc.)
• Prepare Presentation
• Prepare for Documentation and Code Transfer
• Plan for a Build Exercise
• Plan for a Runtime Exercise
• Factor any Continuing Support
Presentation

- Software Overview
  - Requirements
  - Use Cases
  - Reference Documentation
  - Development Metrics (LOC, overall complexity, etc.)
- Design Concepts
  - Software Architecture and Strategy
  - 3rd party products and interfaces
  - Communications Strategy
  - Languages/Scripts
  - User Interface (GUIs)
  - Performance / Design Constraints
- Build/Run-time Concepts
  - Source Control
  - Makefiles, scripts
  - Configuration files
  - Start/Stop/Monitoring tools
  - Logging / Analysis concepts
Training

- Documents Review / Feedback / Questions
- Build Exercise
  - Source Management / Extraction
  - Build
  - Deploy/Install
- Runtime Exercise
  - Start/Stop
  - Monitoring logs, errors, and performance
  - Post-run analysis (ensure performance and products are as expected)
- Engineering Tools?
- Test/Debug Procedures & Tools?
- Simulation capabilities?
- Off-Line Data Analysis Tools?
Non-Ideal Software Handover (Reverse Engineering)

• Reverse engineering exercises should be avoided whenever possible
  • Prone to errors and misunderstandings
  • Often Leads to loss of functionality, code breakage, or “frozen” software.

• But, when needed (i.e. lack of a better option):
  • Determine what documents are available
    • Determine what is good, vs. what is unreliable/bad
  • Perform a Code Review
    • Derive:
      • Architecture, interfaces, critical comm, 3rd party products, languages used, GUls, etc.
      • Implemented Requirements and Use Cases
  • Attempt to Access (if possible) Original Expertise
  • Develop Risk Mitigation strategy for keeping original release working while getting ready for new build/release.
System Administration

- Identify all accounts and logins
- Identify all equipment makes, models, OS, and versions
- Document how computers were set up and configured
  - 3rd party interfaces/equipment
  - Installed programs/packages
  - Required Licenses & Maintenance agreements
  - Periodic procedures (cron jobs) identified
- Architecture
  - Port mapping
  - Switch map
  - Etc.
- As-built Network Architecture diagram
  - Internal equipment
  - Connectivity to backbone
- Spares
  - Strategy
  - Vendors