

Use of XML Technology for Process Modeling (and Interactive Tech Data)

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- Simple Process Modeling Tool - KnowIt
 - Used internally and FA 22 Program

- XML Based Technology
 - Supports interactive graphics and text
 - Web application based on open web standards
 - HTML, XML, JSP, Javascript, SVG, Java
 - No proprietary graphical tool or formats
 - Web client or autonomous mode
 - Applicability to graphics and tools for Technical Data

- Relevance
 - Technology for simple, powerful, interactive web tools
 - Interactive tools can replace/augment traditional static data (diagrams, manuals, drawings)

login.jsp - Windows Internet Explorer


http://localhost:8078/fa22/login.jsp

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login.jsp

KnowIT


Process & Knowledge Management System



Please Sign In:

User Name: Password:

- [Help / Email Webmaster](#)



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INTERGRAPH

F-22 Logistics Management

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```

    graph LR
      A["&"] --> B["X"]
      B --> C["New Requirements Generation  
1"]
      C --> D["X"]
      D --> E["Procurement  
3"]
      E --> F["Warehousing and Inventory Management  
4"]
      F --> G["Distribution and Transportation  
5"]
      G --> H["End User Support  
6"]
      H --> I["&"]
      C --> J["Requisition Management  
2"]
      J --> K["Performance Measurement and Reporting  
7"]
      I --> K
  
```

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INTERGRAPH

MICAP 1st Priority

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- F-22 Logistics Management
 - + 1 New Requirements Generation
 - 2 Requisition Management
 - + 2.1 MICAP 1st Priority
 - + 2.2 Non-MICAP Priorities
 - + 2.3 Asset Management Queue
 - 330 Goto / Warehouse and Inventory Management
 - 331 Goto / End User Support
 - 332 Goto / Requisition Received Into GOLD
 - 333 Requisition Not Filled
 - 334 Requisition Filled
 - 337 GOLD Compares Req to Available Inventory
 - 338 Requisition Received into GOLD
 - WVP MOD Kit Requisition
 - + 340 GFE / Base Part Requisition
 - + 341 Repairable Spares Requisition
 - WVP Production Requisition
 - + 343 New Base Startup Process
 - + 3 Procurement
 - + 4 Warehousing and Inventory Management
 - + 5 Distribution and Transportation
 - + 6 End User Support
 - + 7 Performance Measurement and Reporting

```

    graph LR
      Start((X)) --> G1{X}
      G1 --> T5[Asset Source Located 5]
      G1 --> T6[Asset Source Not Located 6]
      T5 --> G2{X}
      T6 --> G2
      G2 --> T7[Action if MICAP Closed in SBSS and Open in GOLD 7]
      T7 --> End((X))
  
```

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Properties

Property Name	Property Value
a. *Activity Number	2
b. *Activity Title	MICAP Notification and Research
c. *Actor (Who)	SCM
d. Description (What)	MICAP is generated through the AF SBSS system, and usually followed up with the responsible SCM being
e. Input	MICAP Notification and / or GOLD Report
f. Output	Decision on where to fill MICAP
g. *Trigger (Activity Begins with)	MICAP notification and/or GOLD Report
h. *Done (Activity Ends With)	SCM emails MICAP Sect /RSS/ LM Liaison with status regarding how MICAP will be filled.
i. *Flow Time	
j. *Touch Time	
k. Type Delay	
l. Number of People	60 SCMs
m. Work in Progress (WIP) Pieces	
n. Change Over (C/O) Time	

Buttons: Update, Cancel

Process Block Properties

X co-ord:
Y co-ord:
Activity #:
Activity Title:
Actor:
Description:
Input:
Output:
Trigger:
Done:
Flow Time:
Touch Time:
Type Delay:
of People:
WIP Pieces:
COT:
% Yield:
Data Source:
Platform:
Application:
Type:
Name:

Knowit

The diagram shows a process flow on a grid. It consists of three rectangular blocks and a central connector. The first block on the left is labeled '643' and contains the text 'No name has been assigned to this block'. The second block in the middle is labeled '644' and also contains 'No name has been assigned to this block'. The third block on the right is labeled '645' and contains 'No name has been assigned to this block'. A connector, represented by a vertical bar with a circle on the right side, is positioned between blocks 644 and 645. Lines connect block 643 to block 644, and block 644 to the connector. A line also connects the connector to block 645. The blocks are arranged in a roughly horizontal line, with block 645 positioned lower than the others.

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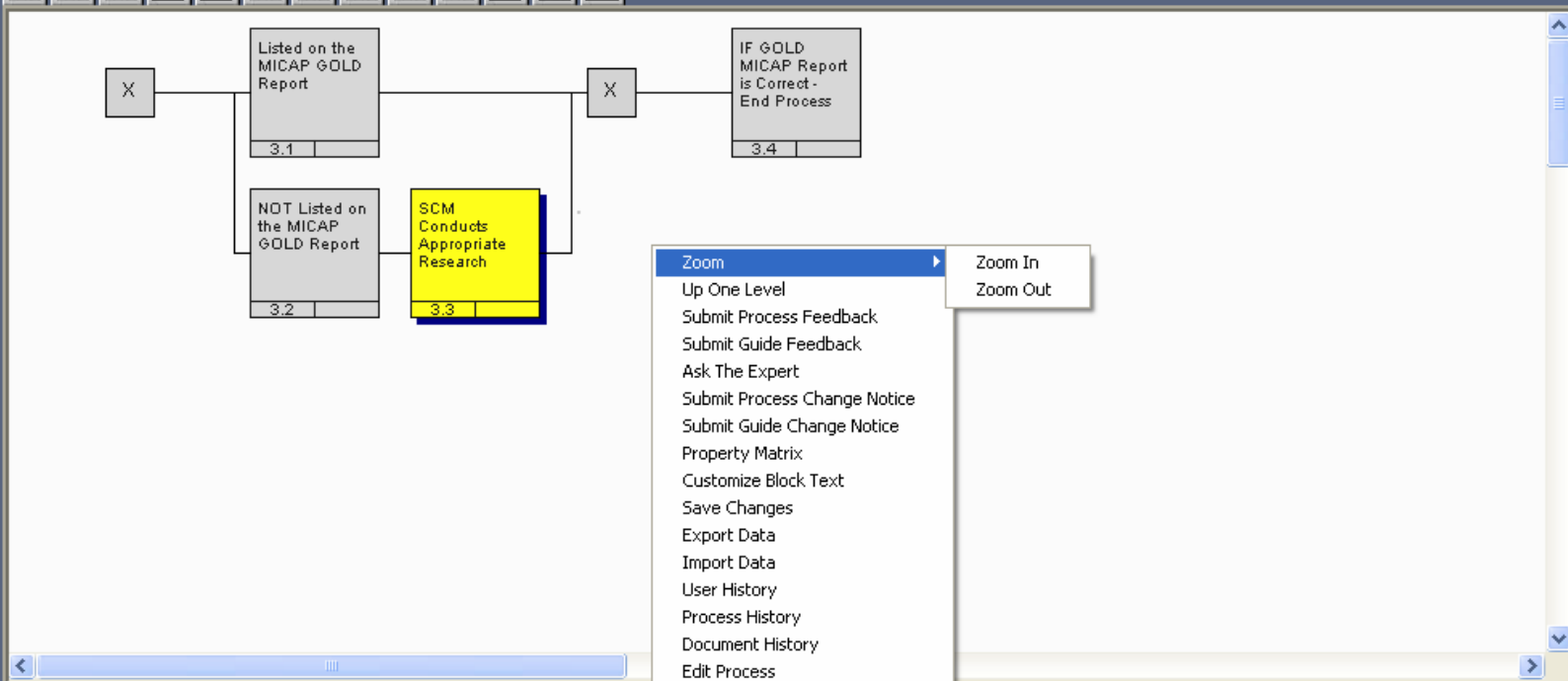
Process & Knowledge Management System



SCM Checks GOLD MICAP Report



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INTERGRAPH

SCM Check Search D MICAP Report

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```

graph LR
    X1((X)) --> B1[3.1 Listed on the MICAP GOLD Report]
    X1 --> B2[3.2 NOT Listed on the MICAP GOLD Report]
    B1 --> B3[3.3 SCM Conducts Appropriate Research]
    B2 --> B3
    B3 --> X2((X))
    X2 --> B4[3.4 IF GOLD MICAP Report is Correct - End Process]
  
```

Search For: Go

Results

- Description
- Role
- FAQ
- Resource Library

http://spectre:8078/fa22/index.jsp# Local intranet 100%

- [-] F-22 Supply Support Resource Library
 - [+] Forms
 - [-] General
 - [+] SAMS - IPQ Error Codes
 - [+] Redistribution Order Denial Codes
 - [+] Routing Identifier Codes
 - [-] Glossary
 - [-] Presentations
 - [+] Procedures
 - [+] Project Meetings
 - [+] Training



Properties

Name:

Key Words:

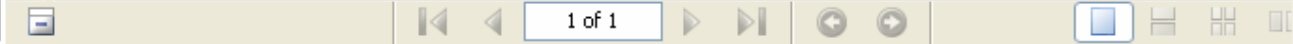
SAMS; IPQ; Error Codes; training; provisioning;




Provisioning 

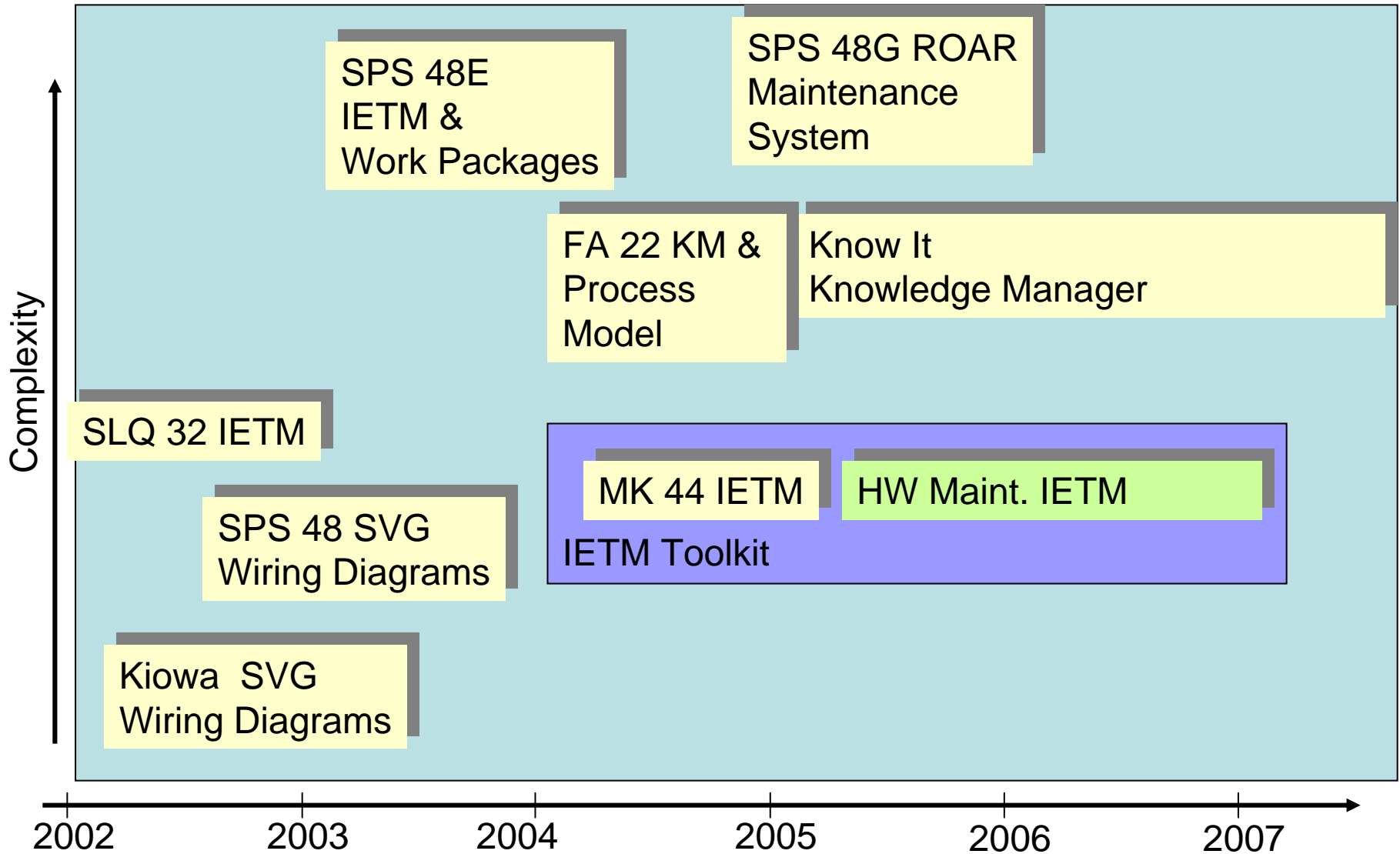
SAMS – IPQ Error Codes

01 – PN/PLANT NOT IN PART MSTR	71 – PLANT CODE MUST BE ENTERED
02 – NO STRUCTURE IN MBOM	72 – TOTAL WO QTY NOT = TOT ORD VQTY
03 – PN NOT PXREF TABLE	73 – INVALID ORDER TYPE
04 – INVALID MB CODE	74 – LAC MUST BE ENTERED
06 – INVALID CUM LT	75 – INAPPROP WO FOR ALLOC MATERIAL
07 – INVALID TOTAL PURCH LT	76 – INAPPROPRIATE WO FOR GRAPHITE
08 – NO ENGR RELEASED	77 – ALLOC WO NOT VALID FOR NON-ALLO
40 – INVALID CHARGE RECEIPT	78 – LAC NOT FOUND ON LACTB
41 – MUST ENTER PEGGING DATA	79 – NO TRANSACTION IS PROVIDED
42 – ACCOUNTING DATA ENTERED INVALID	80 – SUB ACCT WIP TYPE REQS ON WAA
43 – DEPT, WO JOB, SUBACCT NT COMPATBL	81 – WO MUST = 01101900 OR ALLOC CD=B
44 – INVALID MAKE/BUY CODE	82 – WO CANNOT = 01101900
45 – DECIMAL QTY NOT PERMITTED	83 – ALL PRSNO MUST HV SAME ACCT/SUB
46 – INVALID ACCT DATA FOR OVERHEAD	84 – DOES NOT HAVE MATL SEGMENT
47 – WO NOT FOUND ON MASTER DB	85 – INVALID LAC TYPE
48 – WO INACTIVE IN WO DATABASE	86 – SUB ACCT MUST START W/ZERO
49 – WO/ACCT MUST BE CODED PROCUREMNT	87 – WO CAN'T RESIDE ON FWDPSPAW
50 – WO/ACCT LMB CODE MUST = B	88 – WO CANNOT = 107MRELY
51 – NO WO QTY ENTERED	89 – WO LMB CODE MUST = B OR M
52 – INVALID WO QTY	90 – EXCESS ISS RQD FOR WO JOB
53 – DPT 17 WO JOB NT COMPATBL W THA	91 – SUB ACCT INVALID FOR NONPROD 16X
54 – WIP TYPE/SUBACCT NOT VALID	92 – ORD POLICY MUST=R ON WO 01099008
55 – PROBLEM WITH IMS STATUS CODE	93 – WO 9XXXXXXX FOR EMC ONLY
56 – WO NOT VALID FOR DEPT	94 – INAPPROP WO FOR NON ALLOC MATL
57 – NOT A VALID DEPARTMENT	95 – MORE THAN 3 DECIMAL PLACES
58 – OH POOL NT COMPATBL WITH DEPT	96 – PRSNO IS INACTIVE ON DB2 TABLE
59 – TOTAL ORDER QTY INVALID	97 – WO & ACCT/SUB CAN'T BOTH EXIST
60 – PROD PT CAN'T USE OH WO OR PSRNO	98 – INVALID DEPT FOR MAKE PART
61 – INVALID TYPE VERSION	
62 – INVALID PART TYPE	
63 – MB/ORD TYPE NT COMPATBL W/TRANS	
64 – UNIDENTIFIED TRANSACTION ID	
65 – WO/CONTRACT CAN'T BEGIN WITH 000	
66 – WO MUST EQUAL 01301900	
67 – WO JOB PROHIBITED FOR THIS TRANS	

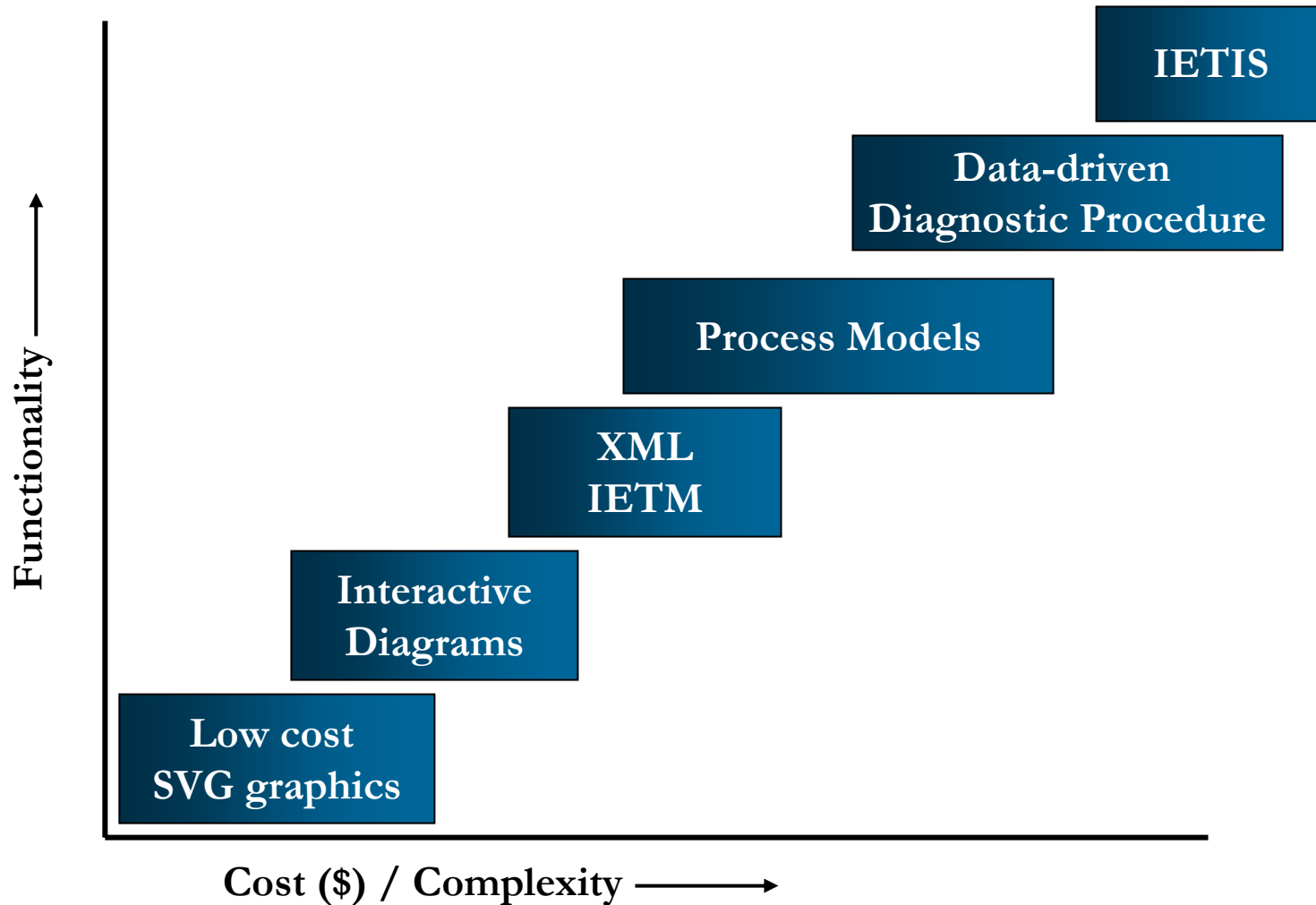


- Data-centric
 - Data structured into XML objects
 - WYSIWYG Editors - Requires no XML tagging expertise
 - Documents can be generated as-needed
 - Also automatically checked for quality
 - Data can reference other data without replication
 - Reuse: define once, use many times
 - Supports variant management
- Dynamic content, not a static document
 - Content always reflects current data
 - User inputs, sensor data, or external signal
 - Ability to automate data changes from other systems
 - Ability to dynamically manipulate both text and graphics

XML Based Technology Projects

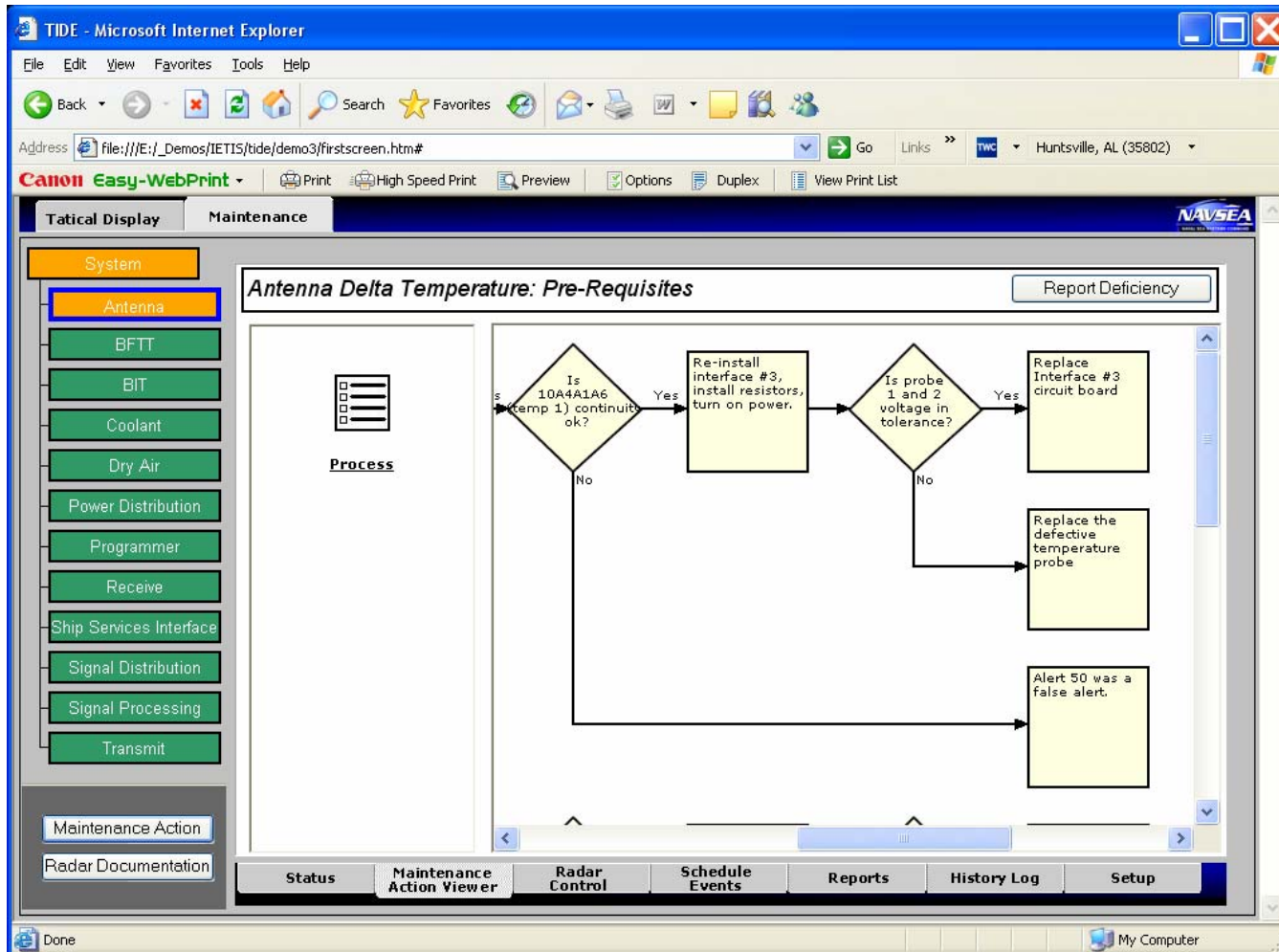


Scalable & Extensible Technology



XML Based Technology

- Troubleshooting Diagram – variation of process model



XML Based Technology

- Different clients for different applications

- Initially implemented using SVG (Scalable Vector Graphics)
 - Adobe distributed a free SVG Viewer
 - NMCI approved
 - Required administrator to install on client
 - Adobe not continuing support for SVG Viewer
 - Now implementing directly in HTML

XML Based Technology Projects

