

NASA Datasets Management Using Process Libraries and Electronic Handbooks



(Where Shakespeare Meets Freud)



Summary



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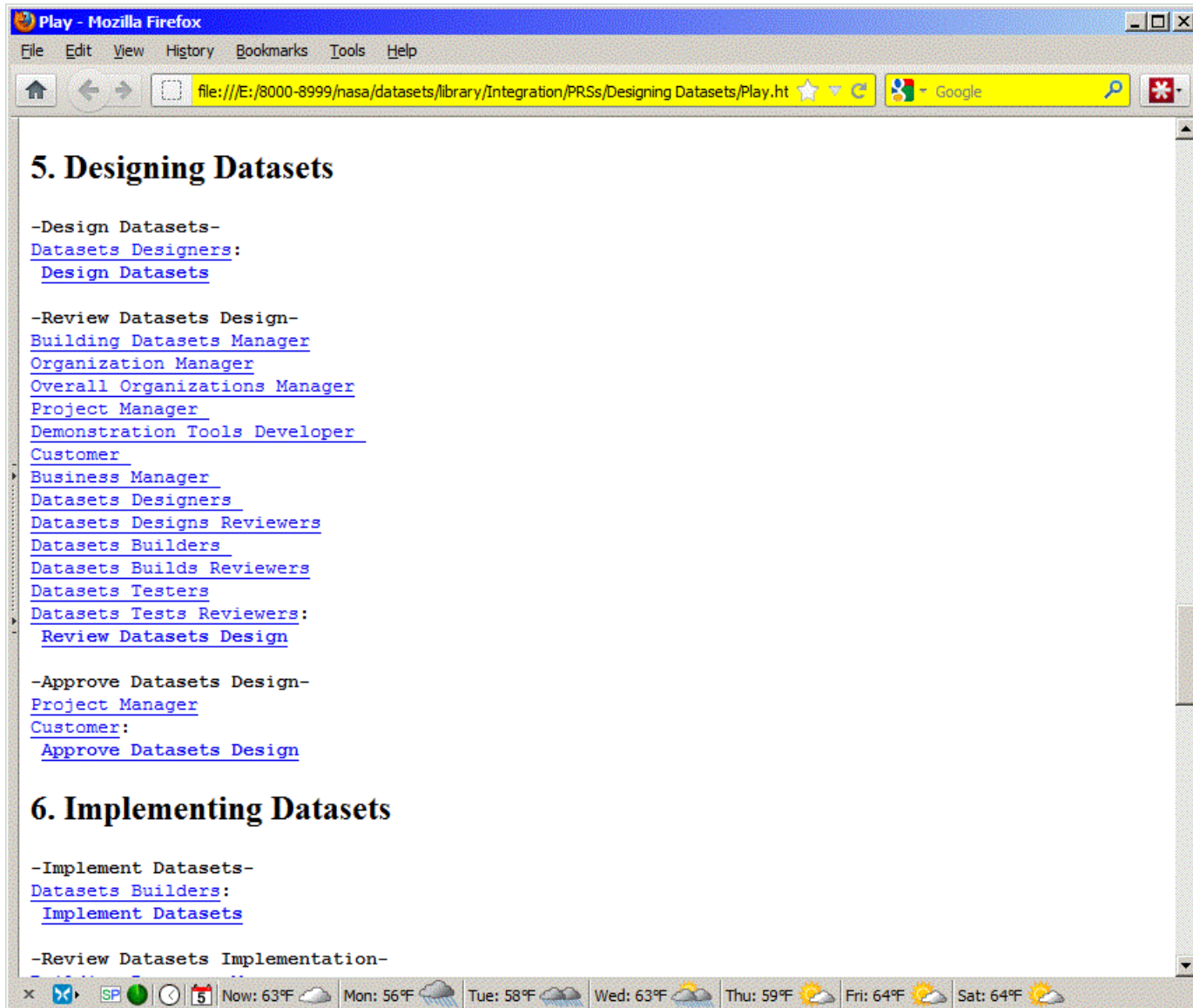
The Bottom Line:

We believe that to truly understand one's universe, one must see it thru multiple “eyes” and also have tools to “communicate” these views.

**To do this, we propose editable and cost-saving process documentation “plays”
for process developers and participants
to help them quickly and effectively learn, integrate, test,
teach, and work together.**

These “plays” may be added to new or existing systems.

Plays describe subprocess execution.



Benefits:

- Facilitates the collection of system and organizational requirements,**
 - Does not anger/upset people whose opinions are heard,**
- and**
- Increases the interaction between managers, process developers, and participants.**

For each subprocess, an “Integration View” is the integration or combination of other subprocess views. An “Integration View” facilitates intra- and inter-organization communication.



All the world's a stage ...

Jaques:

**All the world's a stage,
And all the men and women merely players;
They have their exits and their entrances,
And one man in his time plays many parts,
His acts being seven ages.**

William Shakespeare

As You Like It, Act 2, Scene 7.

The approach uses a modernization of the Socratic Method or Dialogue to gain consensus between Teachers, Documentors, Managers, Implementors, and Participants.



Descriptions summarize subprocesses.

Description - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://ehbs.org/datasets/library/Integration/PRSSs/Designing Datasets/Descri> IMDB

CNN CNN New York Times Washington Post Comcast OOWA NASAFCU File Hippo Cnet Cnet Scoreboards TV Guide MapQuest

Google Search Bookmarks AutoLink AutoFill Sign in

Designing Datasets

Table of Contents

1. [Overview](#)
2. [Play](#)
3. [Documents](#)
4. [Guidelines](#)
5. [Others](#)

1. Overview

In this subprocess, we deal with the process of Designing Datasets. This is where Projects design, build, and test their Datasets.

Organization: ORG

[All-Files](#). These are all the view files.

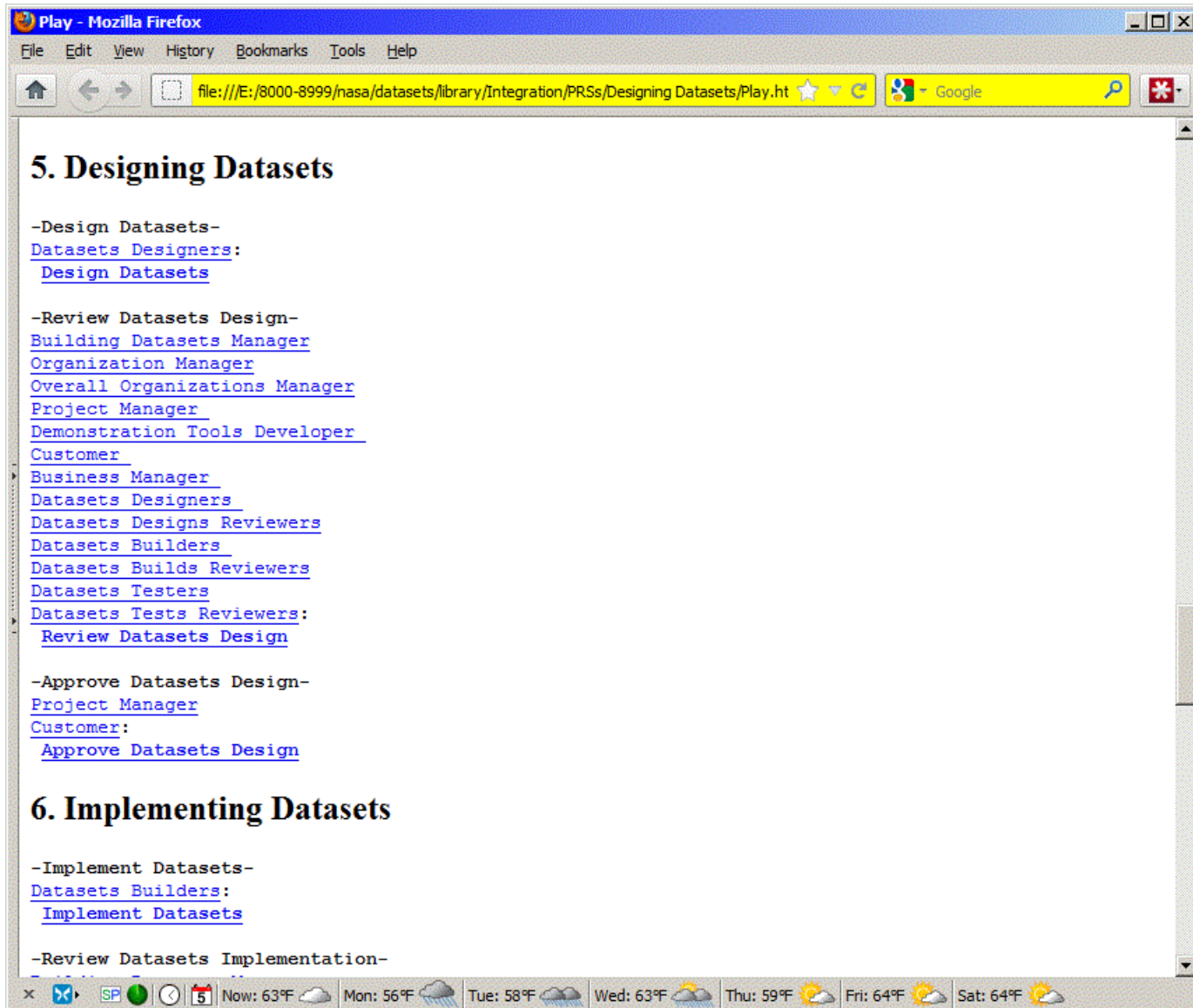
[Benefits](#)

2. Play

In this subprocess, the [play](#) is divided in several parts:

GP Now: Mostly Cloudy, 65 °F Mon: 73 °F Tue: 78 °F Wed: 79 °F Thu: 78 °F Fri: 81 °F Sat: 8

Plays describe subprocess execution.



Documents describe subprocess data.

The screenshot shows a Mozilla Firefox browser window with the address bar displaying <http://ehbs.org/datasets/library/Integration/PRSS/Designing Datasets/Descri>. The page content includes a section titled "3. Documents" and another titled "4. Guidelines".

7. Analysis. This is where reports are generated.

3. Documents

In this subprocess, we have the following document types:

- [Demonstration Tools](#). These are used to represent the Demonstration Tools.
- [Datasets Contract](#). These are used to represent the Datasets Contract.
- [Process Library](#). These are used to represent the Process Library.
- [Implementation Plans](#). These are used to represent the Implementation Plans.
- [Datasets Designs](#). These are used to represent the Datasets Designs.
- [Datasets Designs Reviews](#). These are used to represent the Datasets Designs Review.
- [Datasets Builds](#). These are used to represent the Datasets Builds.
- [Datasets Builds Reviews](#). These are used to represent the Datasets Builds Reviews.
- [Datasets Tests](#). These are used to represent the Datasets Tests.
- [Datasets Tests Reviews](#). These are used to represent the Datasets Tests Reviews.

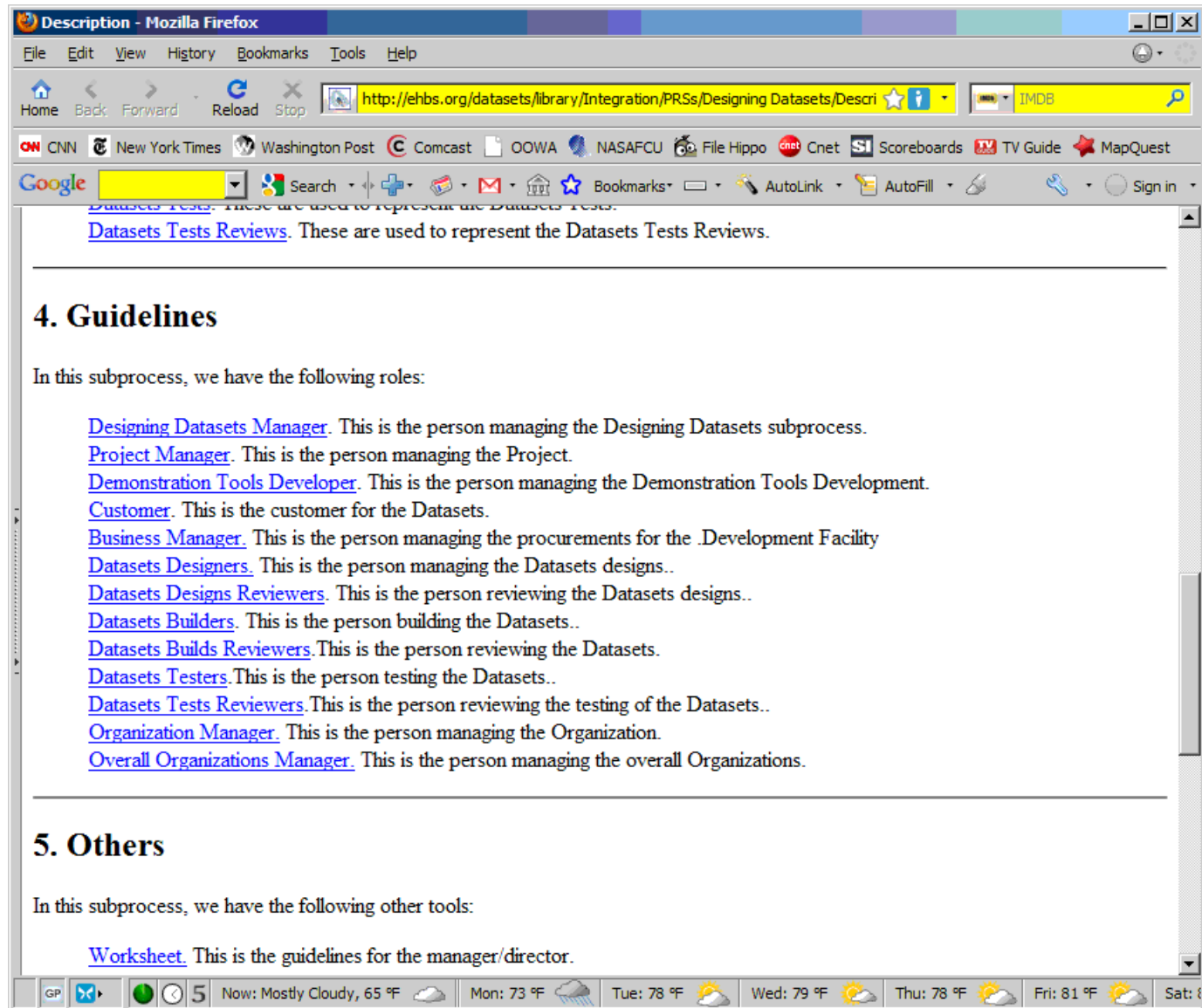
4. Guidelines

In this subprocess, we have the following roles:

- [Designing Datasets Manager](#). This is the person managing the Designing Datasets subprocess.
- [Project Manager](#). This is the person managing the Project.
- [Demonstration Tools Developer](#). This is the person managing the Demonstration Tools Development.
- [Customer](#). This is the customer for the Datasets.
- [Business Manager](#). This is the person managing the procurements for the .Development Facility

The browser's status bar at the bottom shows the system clock as 5:05, the current weather as "Now: Mostly Cloudy, 65 °F", and a forecast for the following days: Mon: 73 °F, Tue: 78 °F, Wed: 79 °F, Thu: 78 °F, Fri: 81 °F, and Sat: 81 °F.

Guidelines describe user subprocesses.



The screenshot shows a Mozilla Firefox browser window. The address bar displays the URL <http://ehbs.org/datasets/library/Integration/PRs/Designing Datasets/Descri>. The page content includes a link to [Datasets Tests Reviews](#) and a section titled "4. Guidelines".

4. Guidelines

In this subprocess, we have the following roles:

- [Designing Datasets Manager](#). This is the person managing the Designing Datasets subprocess.
- [Project Manager](#). This is the person managing the Project.
- [Demonstration Tools Developer](#). This is the person managing the Demonstration Tools Development.
- [Customer](#). This is the customer for the Datasets.
- [Business Manager](#). This is the person managing the procurements for the .Development Facility
- [Datasets Designers](#). This is the person managing the Datasets designs..
- [Datasets Designs Reviewers](#). This is the person reviewing the Datasets designs..
- [Datasets Builders](#). This is the person building the Datasets..
- [Datasets Builds Reviewers](#). This is the person reviewing the Datasets.
- [Datasets Testers](#). This is the person testing the Datasets..
- [Datasets Tests Reviewers](#). This is the person reviewing the testing of the Datasets..
- [Organization Manager](#). This is the person managing the Organization.
- [Overall Organizations Manager](#). This is the person managing the overall Organizations.

5. Others

In this subprocess, we have the following other tools:

- [Worksheet](#). This is the guidelines for the manager/director.

The browser's status bar at the bottom shows the current time as 5:00 and the weather as "Now: Mostly Cloudy, 65 °F". It also displays a forecast for the following days: Mon: 73 °F, Tue: 78 °F, Wed: 79 °F, Thu: 78 °F, Fri: 81 °F, and Sat: 81 °F.

Subprocess Worksheets facilitate subprocess manager communication with process developers and participants.

Worksheet - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Print Stop

file:///E:/8000-8999/nasa/datasets/summary/mock-ups/Worksheet.htm

IMDB

Subprocess Worksheet

Subprocess: Designing Datasets

Purpose: The purpose of this subprocess is to design Datasets.

Organization: IMAGE

Task	Purpose	Suggested Roles	Task Lead(s)	Estimated Completion Date	Actual Completion Date	Documents					
						Document	Instructions and Samples	Document Lead(s)	Estimated Completion Date	Actual Completion Date	Document Location(s)
Administration	The purpose of this task is to administer the design of Datasets.	Task Lead, Subtask Lead, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	08/23/07	Document Library	Samples	James Green	06/23/07	07/23/07	Library: NS2034
Planning	The purpose of this task is to plan the design of Datasets.	Task Lead, Subtask Lead, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	06/23/07	06/23/07	Planning Document	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Draft Project Requirements Document	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Project Plan	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
Designing Datasets	The purpose of this task is to design the Datasets.	Task Lead, Subtask Lead, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	07/23/07	Design Document	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Project Plan	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Review Forms	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Approval Forms	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Development Document	Instructions and	James Green	06/23/07	07/23/07	Library: NS2034

Do... Now: Sunny, 75° F Tue: 87° F Wed: 85° F Thu: 85° F Fri: 85° F Sat: 87° F Sun: 84° F

References list other related resources.



Credits acknowledge people's contributions.



Tools that can be focused on during stages- by tool.

Tools To Focus On During Stages. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ehbs.org/intro/summary/stages1.html

Google

Tools To Focus On During Stages- By Tool.

Tool	Process Developer	Process Participant
Descriptions	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together
Plays	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together
Documents	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together
Role Guidelines/EHBs	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together
Subprocesses Worksheets	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together
References	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together
Credits	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together

Tools that can be focused on during stages- by stage.

Tools To Focus On During Stages. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ehbs.org/intro/summary/stages2.html

Google

Tools To Focus On During Stages- By Stage.

Stage	Process Developer	Process Participant
Learn	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.
Integrate	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Documents Using Role Guidelines/EHBs.
Test	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.
Teach	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.
Work Together	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.

Outline of Presentation:

- The Bottom Line-**
 - Objectives-**
 - Solution-**
- Where Shakespeare Meets Freud-**
 - Some Applications-**
 - Things Supported-**
 - Examples-**
 - Final Thoughts-**

Objective:

Develop Internet-based tools to support the paperless documentation and management of complex distributed processes.

Subprocesses - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://ehbs.org/nasadata/whatare/process.htm> IMDB

Datasets

Product Realization Subprocesses*															
Planning					Building			Managing and Distributing							
Integrated Problems-Solutions Database	Planning Datasets	Datasets Development Facility Solicitation Development	Submission	Handling	Gathering Requirements	Designing Datasets	Acquisition	Ingest	Using Datasets	Improving Datasets	Revising Dataset	Publication	Preservation	Closing Datasets	Post-Closeout

(Potential Customers: Flight Projects, Researchers)

Product Distribution Subprocesses							
Integrated Problems-Solutions Database	Planning Distributions	Distribution Facility Solicitation Development	Problem Submission	Problem Handling	Agreement Administration	Agreement Closeout	Post-Agreement Closeout

(Potential Customers: Researchers)

Support Subprocesses								
Survey Management	Computer Systems Development and Evolution	Computer Systems Operations and Network Administration	Home Page Management	Education and Outreach Activities	Facilities Management	Security	Small Systems (Mac and PC) Support	Visualizations

Improvement Subprocesses		
ISO 9001: 2000	CMMI- Staged	CMMI- Continuous

Common Subprocesses					
Organization Subprocess Formulation	Organization Subprocess Implementation	Organization Subprocess Customer Support	Organization Subprocess Evaluation	Organization Subprocess Update	Organization Subprocess Closeout

*Based on Consultative Committee for Space Data Systems:
[Reference Model for an Open Archival Information System \(OAIS\)](#) and
[Producer-Distribution Interface Methodology Abstract Standard](#)

Now: Partly Cloudy, 52 °F Fri: 50 °F Sat: 38 °F Sun: 44 °F Mon: 45 °F Tue: 49 °F Wed: 50 °F

Organizations provide different views of the subprocesses, some of which may be proprietary.

NASA Science Data Archives - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///E:/8000-8999/nasa/datasets/whatare/Organizations.htm

Amazon.com

NASA Datasets Management Organizations

Product Realization Subprocesses Organizations
Advanced Composition Explorer (ACE)
ACRIMSAT Mission
Aura Mission
Cassini-Huygens Mission
Chandra X-ray Observatory
Cosmic Hot Interstellar Plasma Spectrometer (CHIPS)
Cluster ESA/NASA Mission
Deep Impact
ISS Expedition 10
Fast Auroral Snapshot Explorer (FAST)
Far Ultraviolet Spectroscopic Explorer (FUSE) Mission
Galaxy Evolution Explorer (GALEX) Mission
Genesis Mission
Geotail Mission
Gravity Probe B (GPB) Mission
Gravity Recovery and Climate Experiment
High Energy Transient Explorer-2 (HETE-2) Mission
Hubble Space Telescope
Ice Cloud and Land Elevation Satellite (ICESat) Mission
Imager for Magnetopause-to-Aurora Global Exploration (IMAGE)
INTErnational Gamma-Ray Astrophysics Laboratory (INTEGRAL)
Mars Express
Mars Exploration Rover - Opportunity
Mars Exploration Rover - Spirit
Mars Global Surveyor
Mars Odyssey
MERcury, Surface, Space Experiment, GEOchemistry and Ranging (MESSENGER) Mission
Muses-C
NOAA-M Environmental Satellite
Polar Mission
Reuven Ramaty High Energy Solar Spectroscopic Imager (RHESSI)
Rosetta Mission

Now: 82°F Sun Sat: 88°F Sun: 78°F Mon: 76°F Tue: 80°F Wed: 81°F Thu: 80°F

Organizations execute the eight “Play Development” stages.

- 1) summarizing (descriptions),**
- 2) playwriting (outlines),**
- 3) staging (mockups),**
- 4) dress rehearsal (implementations),**
- 5) performance (implementations),**
- 6) evaluations (implementations),**
- 7) revisions (outlines, mockups, implementations),**
- and**
- 8) closing.**

People in organizations provide different views of the subprocesses



**Subprocess
Documentor's
View**



**Subprocess Teacher's,
Manager's, Implementor's
and Participant's Views**

Organizations generate Subprocess Life-Cycle* Views

- **Organization subprocess teachers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)**
- **Organization subprocess documentors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)**
- **Organization subprocess managers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)**
- **Organization subprocess implementors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)**
- **Organization subprocess participants want to quickly learn, integrate, and perform tasks that are part of their views. (Critical)**
- **Organization subprocess managers want to quickly monitor execution of tasks that are part of their views.**
- **Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly improve, test, and teach their subprocesses.**
- **Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly improve, test, and teach using other organization's views.**
- **Organization subprocess teachers, documentors, managers, implementors, and participants become hurt/angry when their views are not supported.**
- **Organization subprocess implementors want to quickly update, test, and teach tools that help facilitate execution of their subprocesses.**
- **Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly leave when their views continue not to be supported.**

*** Also, called the "Universal Subprocess".**

The "Game of Telephone" Syndrome: Where People Pass-On Only Parts of the "Message"



Overview of how editable and cost-saving process documentation tools can solve problems.

Problem	Solution
Develop Internet-based tools to support the paperless documentation and management of complex distributed processes.	Editable process documentation tools can be tailored to each subprocess.
Organizations provide different views of the subprocesses.	Editable process documentation tools can be tailored to reflect different organization's views of the subprocess.
Organizations execute the eight "play development" stages.	Editable process documentation tools can be tailored to reflect the eight "play development" stages.
People in organizations provide different views of the subprocesses.	Editable process documentation tools can be tailored to communicate different people's views of the subprocess.
Organizations generate Subprocess Life-Cycle Views.	Editable process documentation tools can be tailored to reflect different Life-Cycle views of the subprocess.
The "Game of Telephone" Syndrome: Where People Pass-On Only Parts of the "Message".	Editable process documentation tools can be tailored to layer below different people's views of the subprocess.

Solution: Process Libraries maintain organization's views of the subprocesses.

Views - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///E:/8000-8999/nasa/datasets/summary/mock-ups/Views.htm

CNN New York Times Washington Post Comcast File Hippo Summaries Process Libraries NASAFCU Scoreboards Bandwidth

Google Search

Views

Total 30 Entries

Classification: **Product Realization Subprocesses** (T4-00-00-00)

Subprocess: **Designing Datasets** (T4-08-00-00)

[Create View](#)

View	Steps
ASTRO-E2 Don Margolies (Don.Margolies@nasa.gov)	Update Copy Delete
CHIPS Dave Pierce (Dave.Pierce@nasa.gov)	Update Copy Delete
CINDI/TWINS Jim Byrd (Jim.Byrd@nasa.gov)	Update Copy Delete
Constellation-X Liz Citri (Liz.Citri@nasa.gov)	Update Copy Delete
ESDIS MaryAnn Esfandiari (MaryAnn.Esfandiari@nasa.gov)	Update Copy Delete
EO-1 Bryant Cramer (Bryant.Cramer@nasa.gov)	Update Copy Delete
EOS AURA	Update

Done Now: Mostly Sunny, 69° F Sat: 76° F Sun: 82° F Mon: 78° F Tue: 74° F Wed: 69° F

Our basic approach is to wrap organization's subprocesses in a common envelope containing “communication vehicles” that facilitate intra- and inter-organization communication.



Tools that can be focused on during stages- by tool.

Tools To Focus On During Stages. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ehbs.org/intro/summary/stages1.html

Google

Tools To Focus On During Stages- By Tool.

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Credits	Learn, Integrate, Test, Teach, Work Together	Learn, Integrate Documents Using Role Guidelines/EHBs, Test, Teach, Work Together

Tools that can be focused on during stages- by stage.

Tools To Focus On During Stages. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

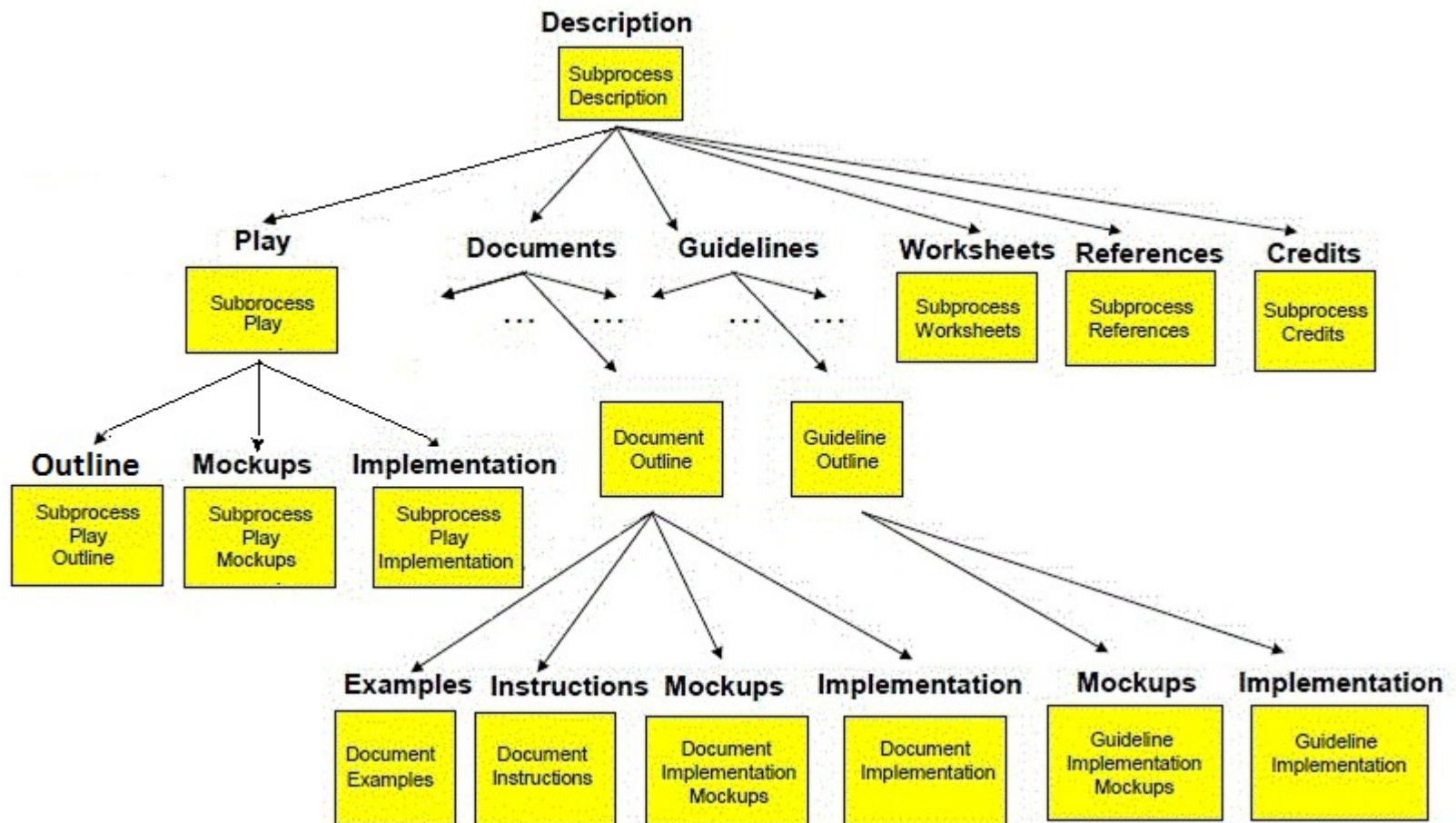
ehbs.org/intro/summary/stages2.html

Google

Tools To Focus On During Stages- By Stage.

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Integrate	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Documents Using Role Guidelines/EHBs.
Test	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.
Teach	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.
Work Together	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.	Descriptions, Plays, Documents, Role Guidelines/EHBs, Subprocess Worksheets, References, and Credits.

For each subprocess, an “Integration View” is the integration or combination of other subprocess views. An “Integration View” facilitates intra- and inter-organization communication.





Process Libraries (PLs) and Electronic Handbooks (EHBs) are where Shakespeare meets Freud.



- In Process Libraries (PLs), subprocesses are represented as "plays" where "actors" communicate thru the Internet. Each organization puts on its own "productions". For each role, Electronic Handbooks (EHBs) (also called Guidelines) guide "actors" thru their parts. Managers are "directors" using Worksheets as learning/management tools. Documentors serve as "playwrights". [Shakespearean]
- Organizations are represented as "families" having "multiple personalities". Subprocess "plays" and its "components" provide communication vehicles between members of the same family, different families, and families from different subprocesses. Documentors also serve as "family therapists". [Freudian]

The approach uses a modernization of the Socratic Method or Dialogue to gain consensus between Teachers, Documentors, Managers, Implementors, and Participants.





Subprocess Life-Cycle Views that are supported.

- **Organization subprocess teachers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)** Organization subprocess teachers copy relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library and then learn, integrate, test, and teach their new organization subprocess Plays/Documents/Guidelines/Worksheets.
- **Organization subprocess documentors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)** Organization subprocess documentors copy relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library and then learn, integrate, test, and teach their new organization subprocess Plays/Documents/Guidelines/Worksheets.
- **Organization subprocess managers want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)** Organization subprocess managers copy relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library and then learn, integrate, test, and teach their new organization subprocess Plays/Documents/Guidelines/Worksheets.
- **Organization subprocess implementors want to quickly learn, integrate, test, and teach their own views of their subprocesses. (Critical)** Organization subprocess implementors copy relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library and then learn, integrate, test, and teach their new organization subprocess Plays/Documents/Guidelines/Worksheets.
- **Organization subprocess participants want to quickly learn, integrate, and perform tasks that are part of their views. (Critical)** Organization subprocess participants study the steps of their organization subprocess view Guidelines.
- **Organization subprocess managers want to quickly monitor execution of tasks that are part of their views.** Organization subprocess managers monitor the execution of tasks using their organization subprocess Plays/Documents/Guidelines/Worksheets.
- **Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly update, test and teach their subprocesses.** Organization subprocess teachers, documentors, managers, implementors, and participants update, test, and teach their organization subprocess Plays/Documents/Guidelines/Worksheets.
- **Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly update, test, and teach using other organization's views.** Organization subprocess teachers, documentors, managers, implementors, and participants update, test, and teach using other relevant organization subprocess Plays/Documents/Guidelines/Worksheets in the Process Library.
- **Organization subprocess teachers, documentors, managers, implementors, and participants become hurt/angry when their views are not supported.** Organization subprocess teachers, documentors, managers, implementors, and participants update, test, and teach their organization subprocess Plays/Documents/Guidelines/Worksheets.
- **Organization subprocess implementors want to quickly update, test and teach tools that help facilitate execution of their subprocesses.** Organization subprocess implementors update, test, and teach tools using requirements from Plays/Documents/Guidelines/Worksheets in the Process Library.
- **Organization subprocess teachers, documentors, managers, implementors, and participants want to quickly leave when their views continue not to be supported.** Organization subprocess teachers, documentors, managers, implementors, and participants archive their organization subprocess Plays/Documents/Guidelines/Worksheets.
- **The Key Human Factor Issue: Communication Within and Across Organizations.** Organization subprocess Plays/Documents/Guidelines/Worksheets in Process Libraries facilitate intra- and inter-organization communication.

Basic People Principles that are supported.

- Subprocesses determine tools.** The approach supports people doing their jobs as they see it. Forcing additional tools on people only adds more burdens to their jobs and they will likely ignore them. Additional requirements should be integrated into existing subprocesses.
- Everyone's subprocesses should be supported as best as possible.** The approach supports people seeing their jobs differently. This is often a good thing for subprocess improvement.
- Tools are role-based so that data is collected during subprocess execution.** As people partake in the subprocesses, the approach supports data entry in the system. If data collection is done after the fact, the quality of the data generally suffers.
- Tools are people-based so that users require minimal training.** The approach helps people to determine which steps to use. For each of the substeps (i.e., forms and documents), the approach should have clear templates, instructions, and samples.
- Tools are web-based so that all users can easily partake.** The web-based approach supports the reduced need to install special software on user's computers. This is especially important in the case where the number of participants is large.
- Everyone helps build the tools.** The approach supports joint ownership in the subprocesses and the underlying systems which is crucial for overall acceptance.

Subprocess/Play Developments that are supported.

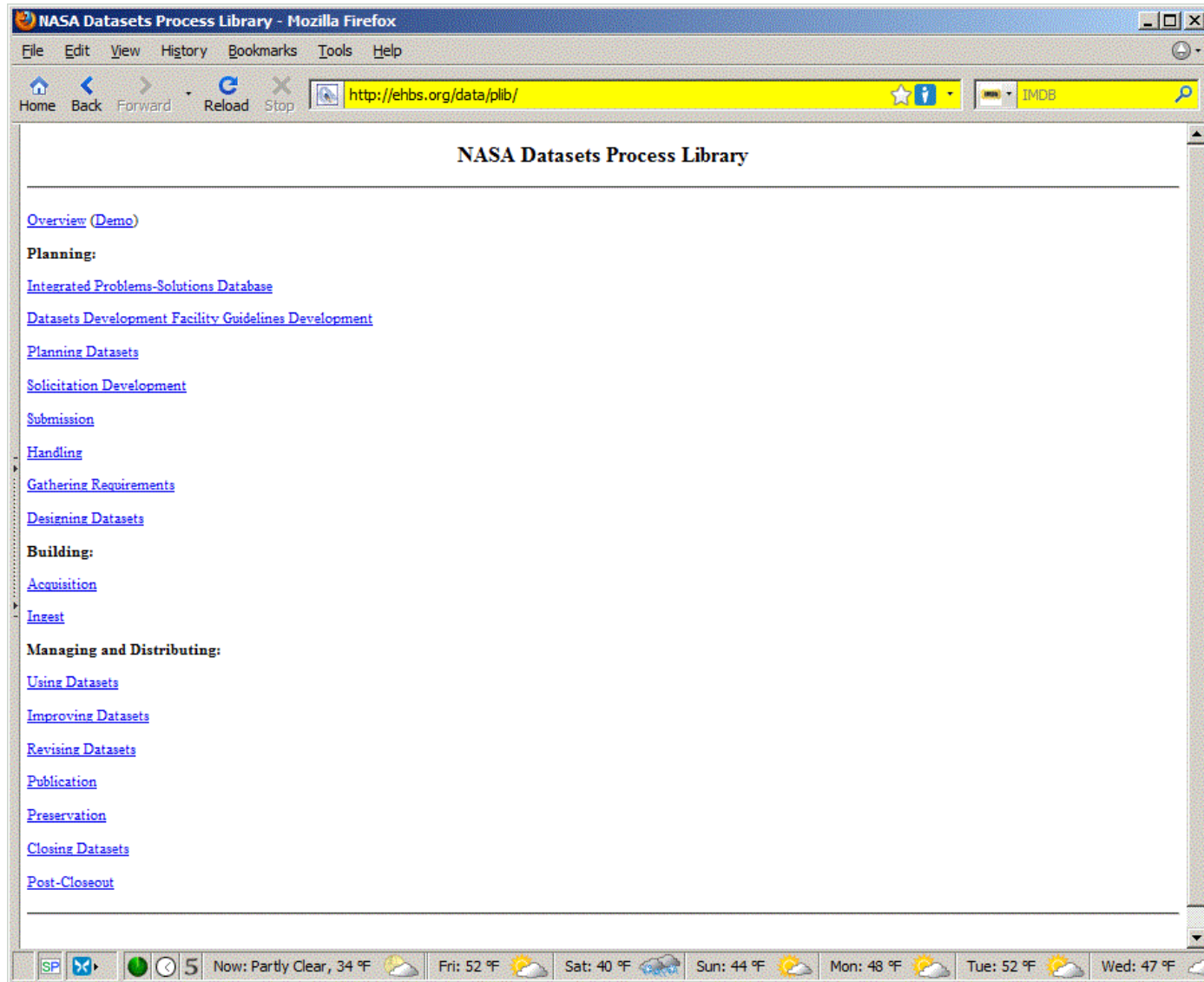
- Presentation & Paper/Marketing.** The approach supports presentation & paper/marketing using the contents of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Worksheet/Outlining.** The approach supports worksheet/outlining using the drafting of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Temporal Flow/Playwriting.** The approach supports temporal flow/playwriting using the drafting of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Examples/Rehearsal.** The approach supports examples/rehearsals using the mockups of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Implementation/Staging.** The approach supports implementation/staging using the building of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Utilization/Performance.** The approach supports users utilization/performance using execution of Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Revision/New Production.** The approach supports revision/new production using updates of the Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.
- Closeout/End Production.** The approach supports closeout/ end performance using storage of the Descriptions, Plays, Documents, Guidelines, Worksheets, Contacts, References, and Credits.

Process Library Operations that are supported.

- **Organization Subprocess Formulation.** The approach supports the introduction of new organizations and their subprocesses into the library.
- **Organization Subprocess Implementation.** The approach supports implementation of common tools for organizations in the library.
- **Organization Subprocess Customer Support.** The approach supports user requests for the library.
- **Organization Subprocess Evaluation.** The approach supports organization subprocess evaluations.
- **Organization Subprocess Update.** The approach supports the updating of organizations and their subprocesses in the library.
- **Organization Subprocess Closeout.** The approach supports the closeouts of organizations and their subprocesses from the library.

Examples

Process Libraries are organized by subprocesses.



View Tools show how organizations view their subprocesses.

Views - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///E:/8000-8999/nasa/datasets/summary/mock-ups/Views.htm

CNN New York Times Washington Post Comcast File Hippo Summaries Process Libraries NASAFCU Scoreboards Bandwidth

Google Search

Views

Total 30 Entries

Classification: **Product Realization Subprocesses** (T4-00-00-00)

Subprocess: **Designing Datasets** (T4-08-00-00)

[Create View](#)

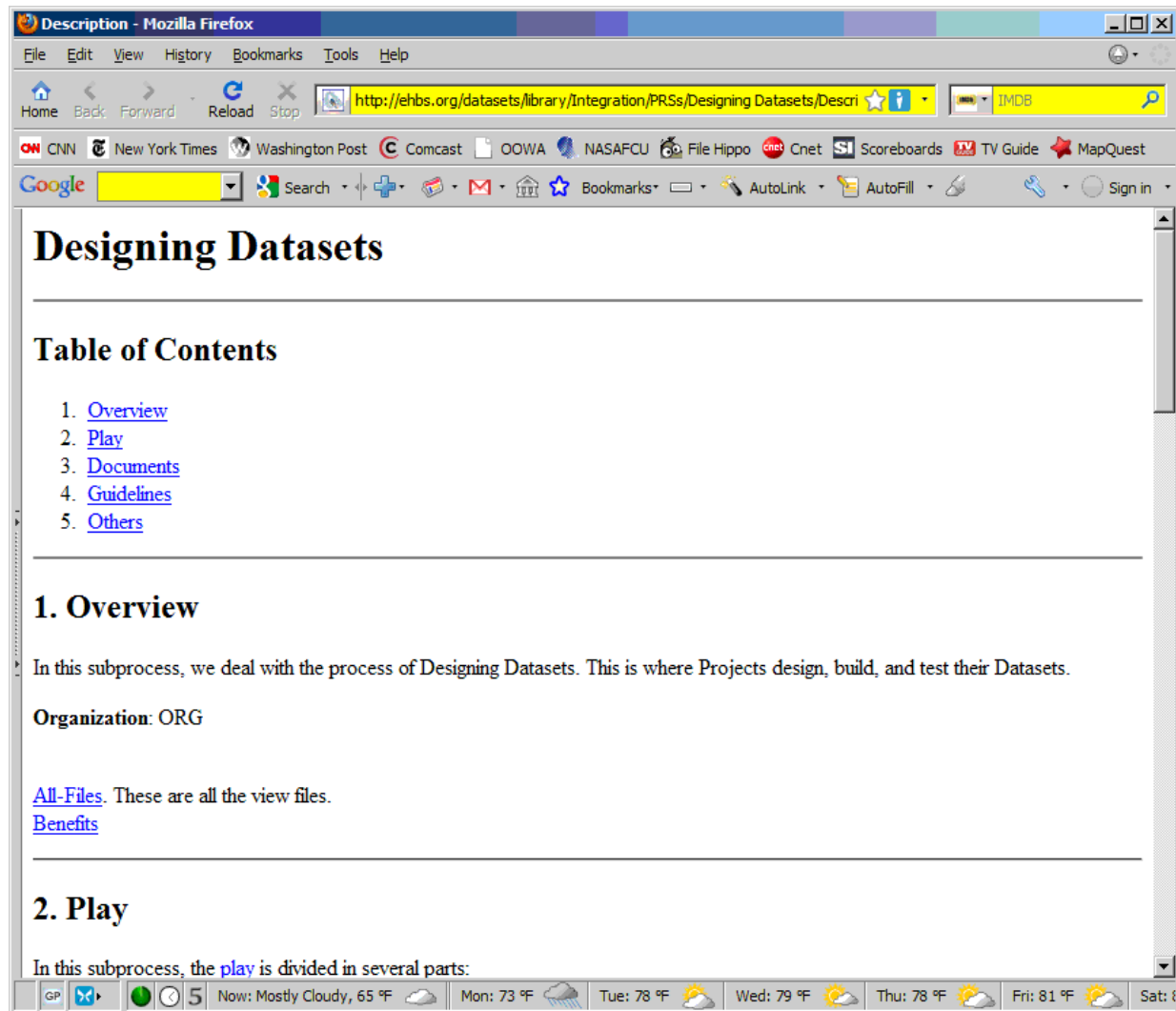
View	Steps
ASTRO-E2 Don Margolies (Don.Margolies@nasa.gov)	Update Copy Delete
CHIPS Dave Pierce (Dave.Pierce@nasa.gov)	Update Copy Delete
CINDI/TWINS Jim Byrd (Jim.Byrd@nasa.gov)	Update Copy Delete
Constellation-X Liz Citri (Liz.Citri@nasa.gov)	Update Copy Delete
ESDIS MaryAnn Esfandiari (MaryAnn.Esfandiari@nasa.gov)	Update Copy Delete
EO-1 Bryant Cramer (Bryant.Cramer@nasa.gov)	Update Copy Delete
EOS AURA	Update

Done Now: Mostly Sunny, 69° F Sat: 76° F Sun: 82° F Mon: 78° F Tue: 74° F Wed: 69° F

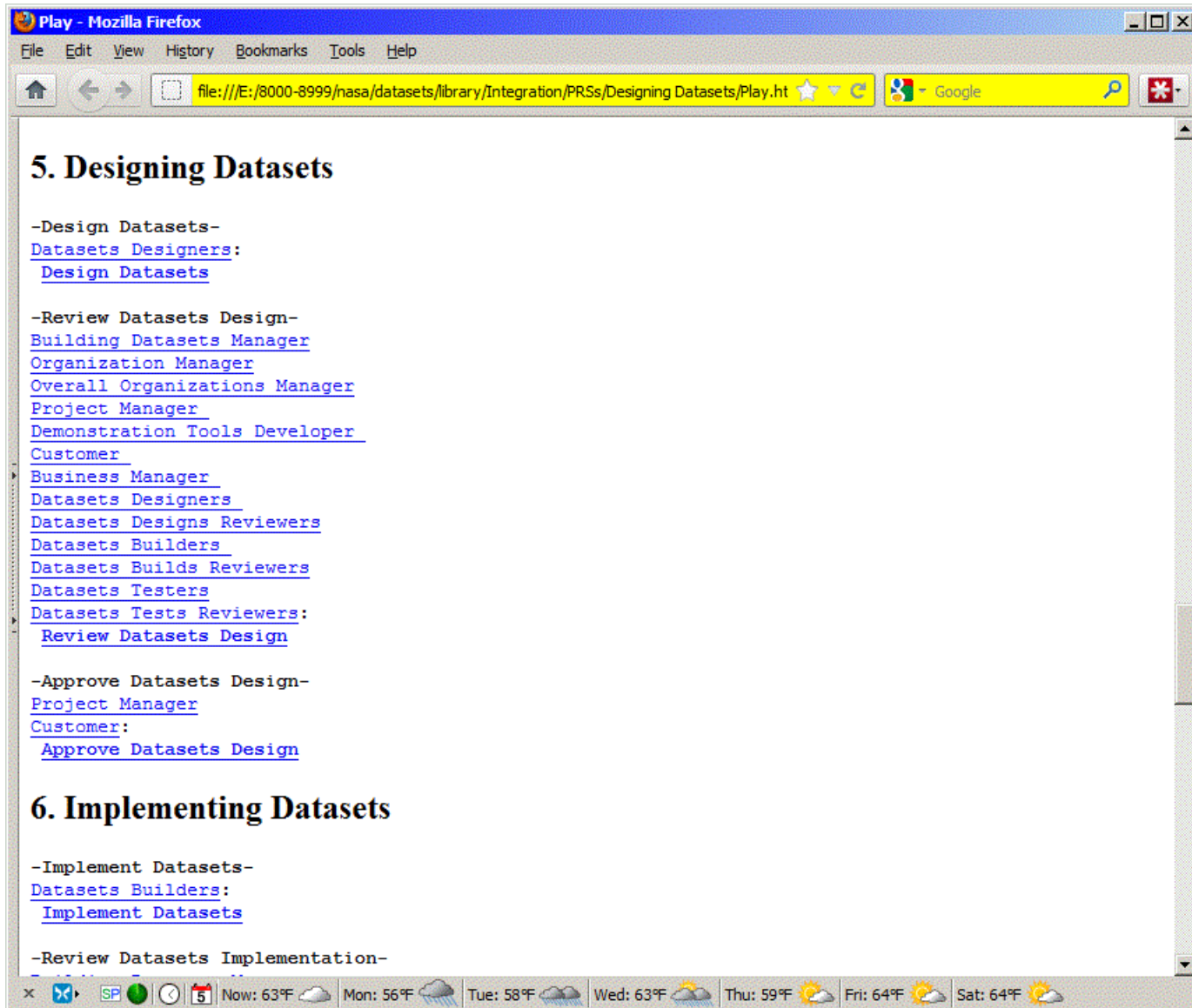
Subprocess View Tools contain the envelope of related files.



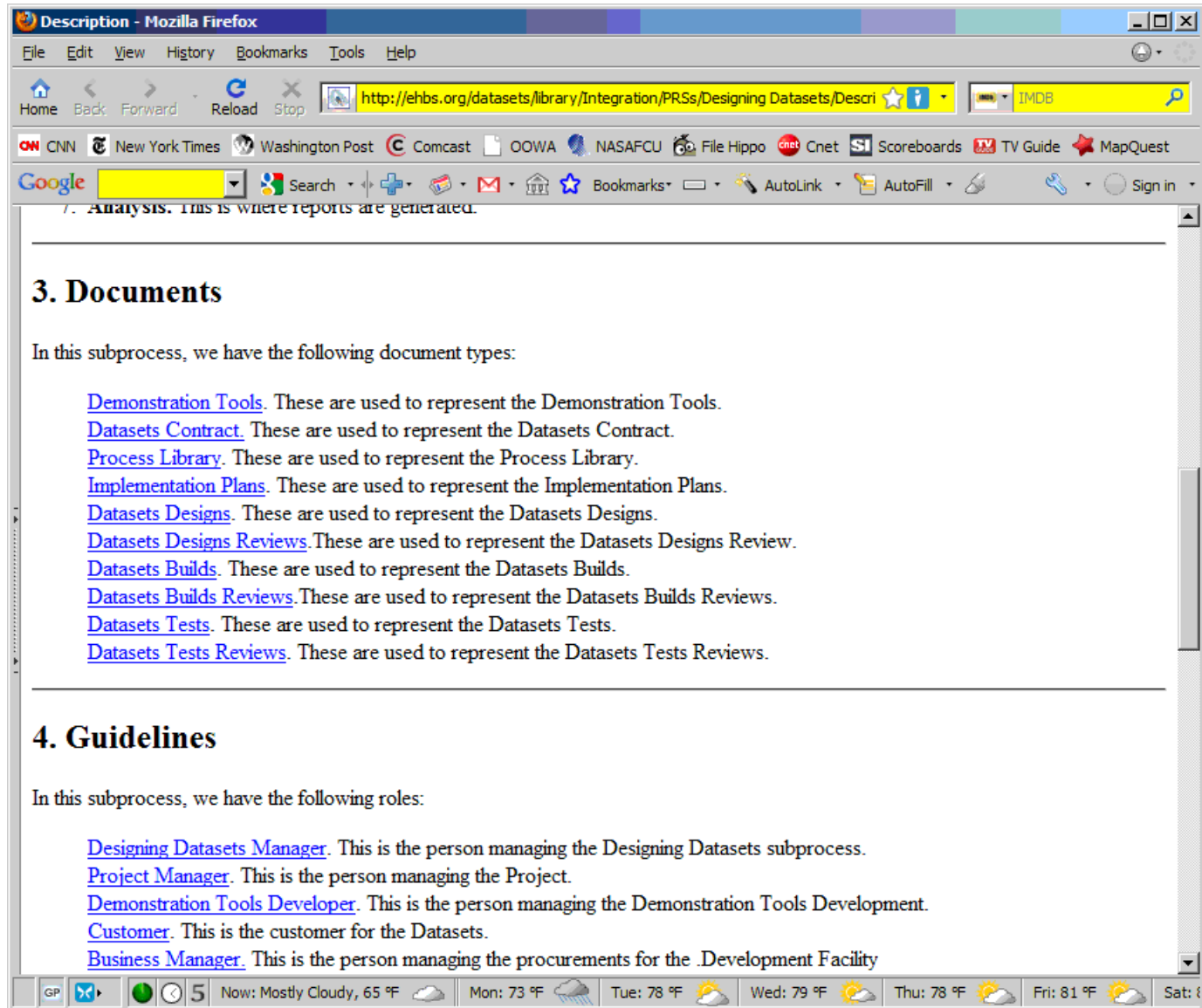
Descriptions summarize subprocesses.



Plays describe subprocess execution.



Documents describe subprocess data.



The screenshot shows a Mozilla Firefox browser window. The address bar displays the URL: <http://ehbs.org/datasets/library/Integration/PRSS/Designing Datasets/Descri>. The page content includes a section titled "3. Documents" with a sub-header "In this subprocess, we have the following document types:". Below this, there is a list of document types, each with a blue underlined link and a description:

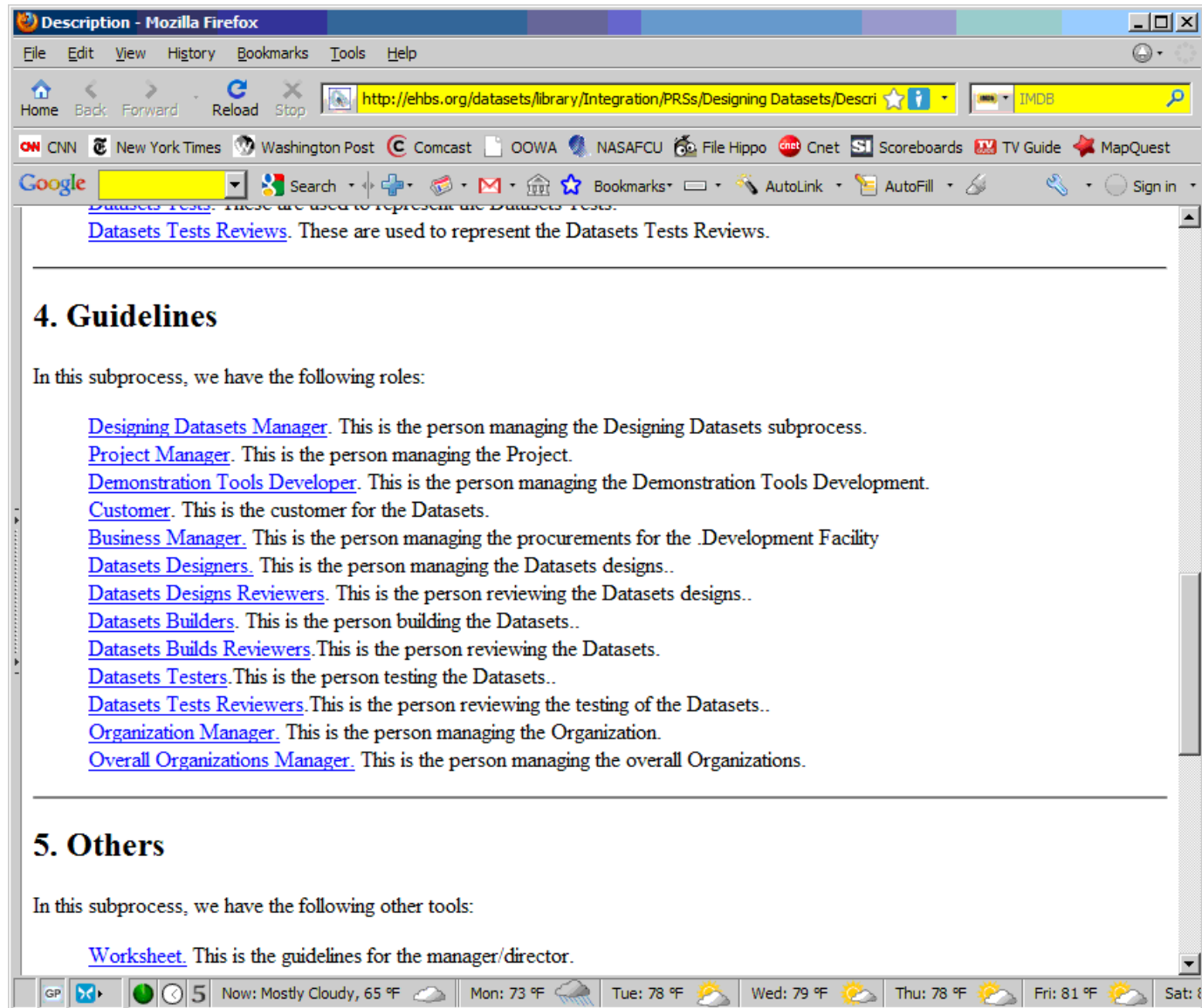
- [Demonstration Tools](#). These are used to represent the Demonstration Tools.
- [Datasets Contract](#). These are used to represent the Datasets Contract.
- [Process Library](#). These are used to represent the Process Library.
- [Implementation Plans](#). These are used to represent the Implementation Plans.
- [Datasets Designs](#). These are used to represent the Datasets Designs.
- [Datasets Designs Reviews](#). These are used to represent the Datasets Designs Review.
- [Datasets Builds](#). These are used to represent the Datasets Builds.
- [Datasets Builds Reviews](#). These are used to represent the Datasets Builds Reviews.
- [Datasets Tests](#). These are used to represent the Datasets Tests.
- [Datasets Tests Reviews](#). These are used to represent the Datasets Tests Reviews.

Below this list is a section titled "4. Guidelines" with a sub-header "In this subprocess, we have the following roles:". Below this, there is a list of roles, each with a blue underlined link and a description:

- [Designing Datasets Manager](#). This is the person managing the Designing Datasets subprocess.
- [Project Manager](#). This is the person managing the Project.
- [Demonstration Tools Developer](#). This is the person managing the Demonstration Tools Development.
- [Customer](#). This is the customer for the Datasets.
- [Business Manager](#). This is the person managing the procurements for the .Development Facility

The browser window also shows a taskbar at the bottom with system icons and a weather forecast for the week.

Guidelines describe user subprocesses.



The screenshot shows a Mozilla Firefox browser window. The address bar displays the URL <http://ehbs.org/datasets/library/Integration/PRs/Designing Datasets/Descri>. The page content includes a section titled "4. Guidelines" with a sub-header "In this subprocess, we have the following roles:". Below this, a list of roles is provided, each with a brief description:

- [Designing Datasets Manager](#). This is the person managing the Designing Datasets subprocess.
- [Project Manager](#). This is the person managing the Project.
- [Demonstration Tools Developer](#). This is the person managing the Demonstration Tools Development.
- [Customer](#). This is the customer for the Datasets.
- [Business Manager](#). This is the person managing the procurements for the .Development Facility
- [Datasets Designers](#). This is the person managing the Datasets designs..
- [Datasets Designs Reviewers](#). This is the person reviewing the Datasets designs..
- [Datasets Builders](#). This is the person building the Datasets..
- [Datasets Builds Reviewers](#). This is the person reviewing the Datasets.
- [Datasets Testers](#). This is the person testing the Datasets..
- [Datasets Tests Reviewers](#). This is the person reviewing the testing of the Datasets..
- [Organization Manager](#). This is the person managing the Organization.
- [Overall Organizations Manager](#). This is the person managing the overall Organizations.

Below the roles section, there is a section titled "5. Others" with a sub-header "In this subprocess, we have the following other tools:". A single tool is listed:

- [Worksheet](#). This is the guidelines for the manager/director.

The browser's status bar at the bottom shows the current time as 5:00 and the weather as "Now: Mostly Cloudy, 65 °F". It also displays a forecast for the following days: Mon: 73 °F, Tue: 78 °F, Wed: 79 °F, Thu: 78 °F, Fri: 81 °F, and Sat: 81 °F.

4. Guidelines

In this subprocess, we have the following roles:

- [Designing Datasets Manager](#). This is the person managing the Designing Datasets subprocess.
- [Project Manager](#). This is the person managing the Project.
- [Demonstration Tools Developer](#). This is the person managing the Demonstration Tools Development.
- [Customer](#). This is the customer for the Datasets.
- [Business Manager](#). This is the person managing the procurements for the .Development Facility
- [Datasets Designers](#). This is the person managing the Datasets designs..
- [Datasets Designs Reviewers](#). This is the person reviewing the Datasets designs..
- [Datasets Builders](#). This is the person building the Datasets..
- [Datasets Builds Reviewers](#). This is the person reviewing the Datasets.
- [Datasets Testers](#). This is the person testing the Datasets..
- [Datasets Tests Reviewers](#). This is the person reviewing the testing of the Datasets..
- [Organization Manager](#). This is the person managing the Organization.
- [Overall Organizations Manager](#). This is the person managing the overall Organizations.

5. Others

In this subprocess, we have the following other tools:

- [Worksheet](#). This is the guidelines for the manager/director.

Subprocess Worksheets facilitate subprocess manager communication with process developers and participants.

Worksheet - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Print Stop

file:///E:/8000-8999/nasa/datasets/summary/mock-ups/Worksheet.htm

IMDB

Subprocess Worksheet

Subprocess: Designing Datasets

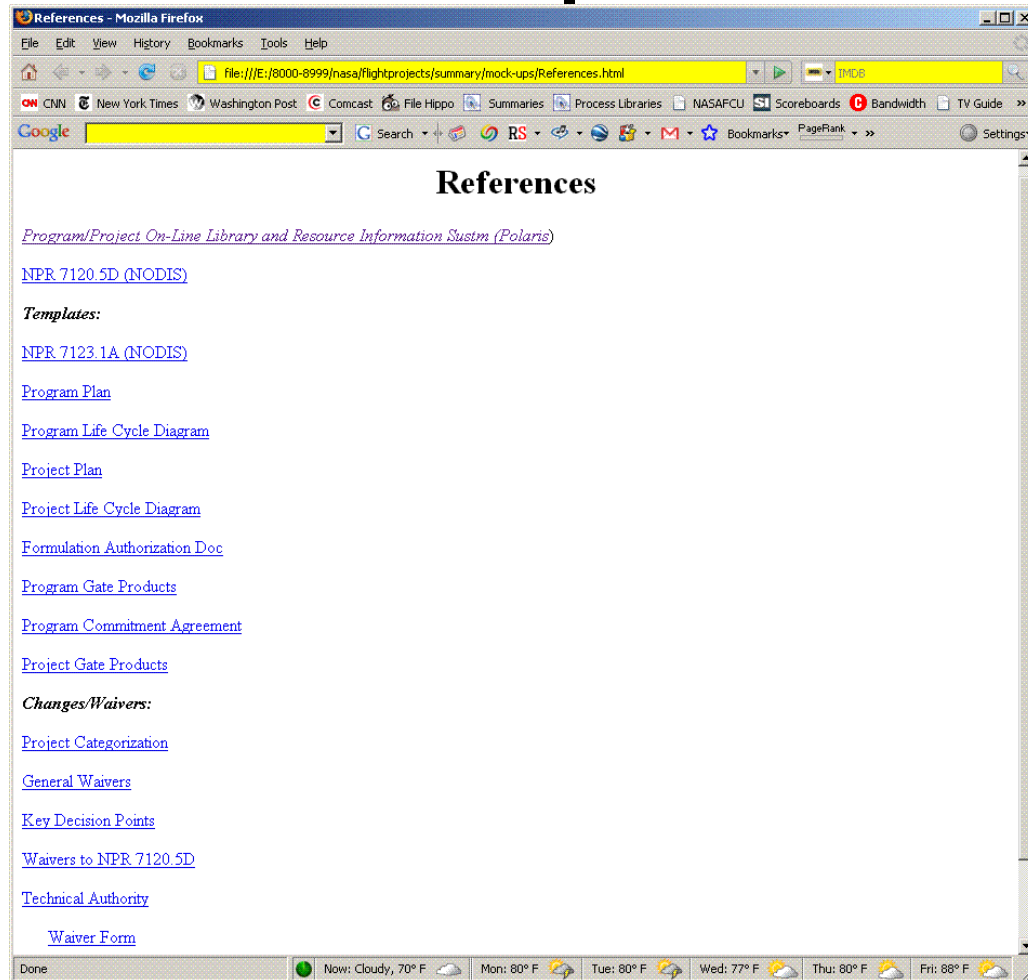
Purpose: The purpose of this subprocess is to design Datasets.

Organization: IMAGE

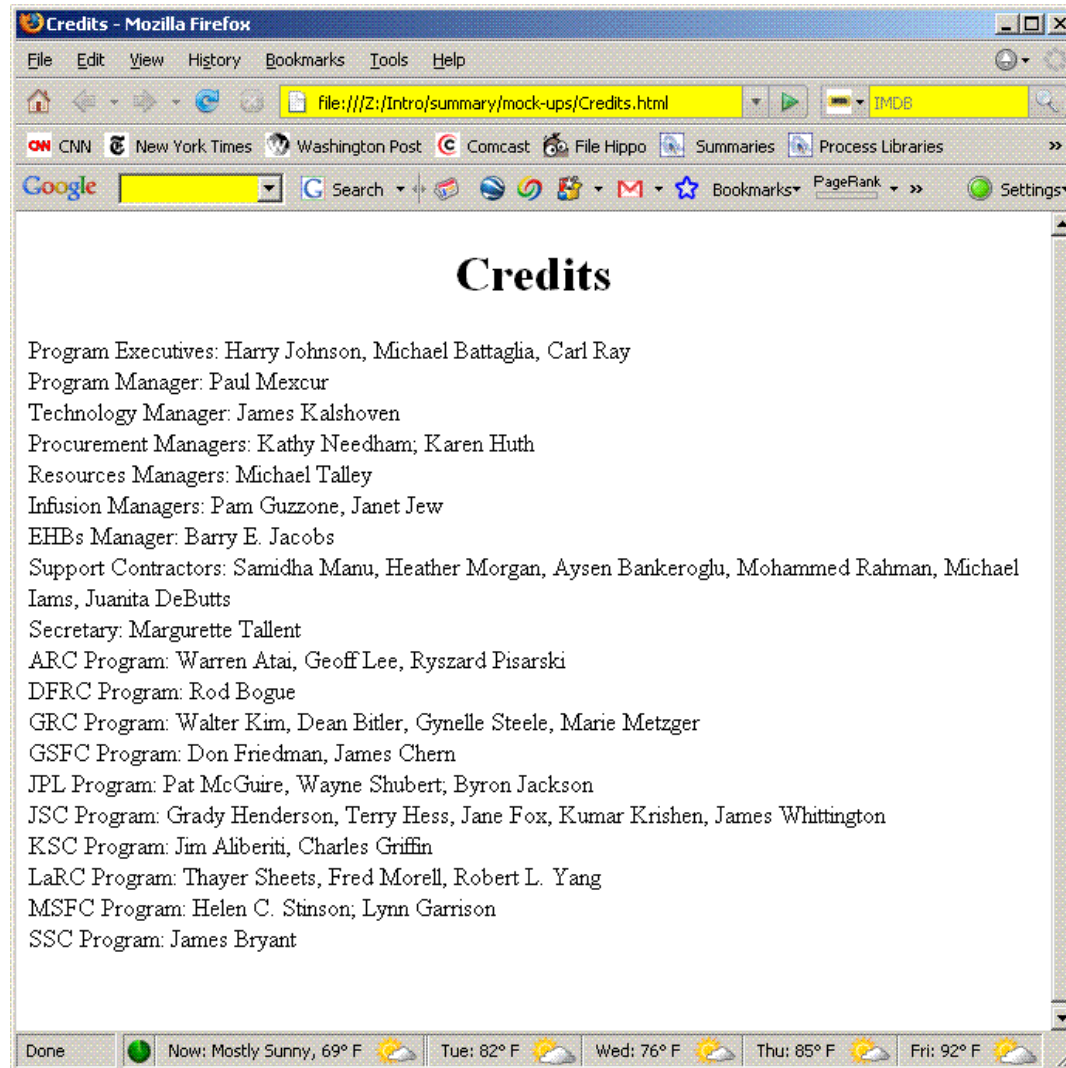
Task	Purpose	Suggested Roles	Task Lead(s)	Estimated Completion Date	Actual Completion Date	Documents					
						Document	Instructions and Samples	Document Lead(s)	Estimated Completion Date	Actual Completion Date	Document Location(s)
Administration	The purpose of this task is to administer the design of Datasets.	Task Lead, Subtask Lead, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	08/23/07	Document Library	Samples	James Green	06/23/07	07/23/07	Library: NS2034
Planning	The purpose of this task is to plan the design of Datasets.	Task Lead, Subtask Lead, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	06/23/07	06/23/07	Planning Document	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Draft Project Requirements Document	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Project Plan	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
Designing Datasets	The purpose of this task is to design the Datasets.	Task Lead, Subtask Lead, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	07/23/07	Design Document	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Project Plan	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Review Forms	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Approval Forms	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
						Development Document	Instructions and	James Green	06/23/07	07/23/07	Library: NS2034

Do... Now: Sunny, 75° F Tue: 87° F Wed: 85° F Thu: 85° F Fri: 85° F Sat: 87° F Sun: 84° F

References list other related resources.



Credits acknowledge people's contributions.



Integration Tools facilitate subprocess integration.

Fetch Integration - Mozilla Firefox

File Edit View History Bookmarks Tools Help

File:///E:/8000-8999/nasa/datasets/summary/mock-ups/Integrations.htm

CNN New York Times Washington Post Comcast File Hippo Summaries Process Libraries NASAFCU Scoreboards Bandwidth

Google Search

Fetch Integration

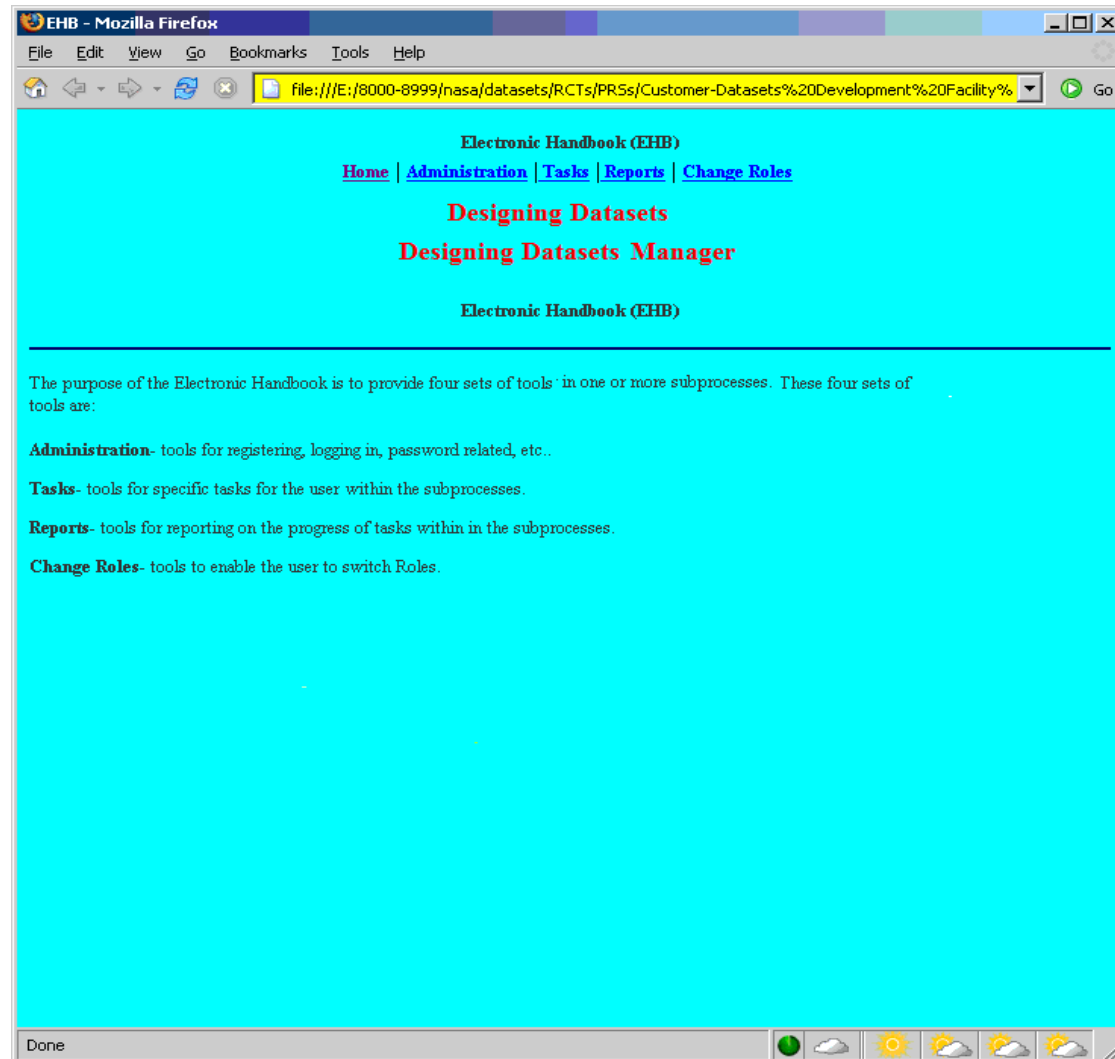
Read Integration	
Classification	Product Realization Subprocesses
Subprocess	Designing Datasets
Type	Guidelines
Title	Designing Datasets Manager
Id	T4-4-3-00
Integration Url	Fetch
Ordinal	33
Date Created	03-MAY-2005
Date Updated	18-MAY-2005

Samples From Views	
ASTRO-E2 Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
CHIPS Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
CINDI/TWINS Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
Constellation-X Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
ESDIS Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
EO-1 Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
EOS AURA Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
ESMO Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
EXIST Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
GALEX	Date Created: 23-Jun-2005

Done

Now: Mostly Sunny, 54° F Sat: 76° F Sun: 78° F Mon: 80° F Tue: 80° F Wed: 74° F

Electronic Handbooks (EHBs) facilitate the execution of subprocesses.



Demonstration Tools introduce the concepts to a community in their terms.

NASA Datasets - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ehbs.org/nasadata/

Google



National Aeronautics and Space Administration (NASA) - Datasets

Process Libraries (PLs) and Electronic Handbooks (EHBs)

[Where Shakespeare Meets Freud]



1. [What Are PLs and EHBs?](#)
2. [Summary](#)
3. [Some Applications](#)
4. [In The Press](#)
5. [Experiences](#)
6. [Some Demonstration Tools](#)
7. [Some Subprocesses and Their Documentations](#)
8. [Assembly Line Processes](#)
9. [Benefits](#)

[White Paper](#)
[Book](#)



U.S. GOVERNMENT COMPUTER
If not authorized to access this system, disconnect now.

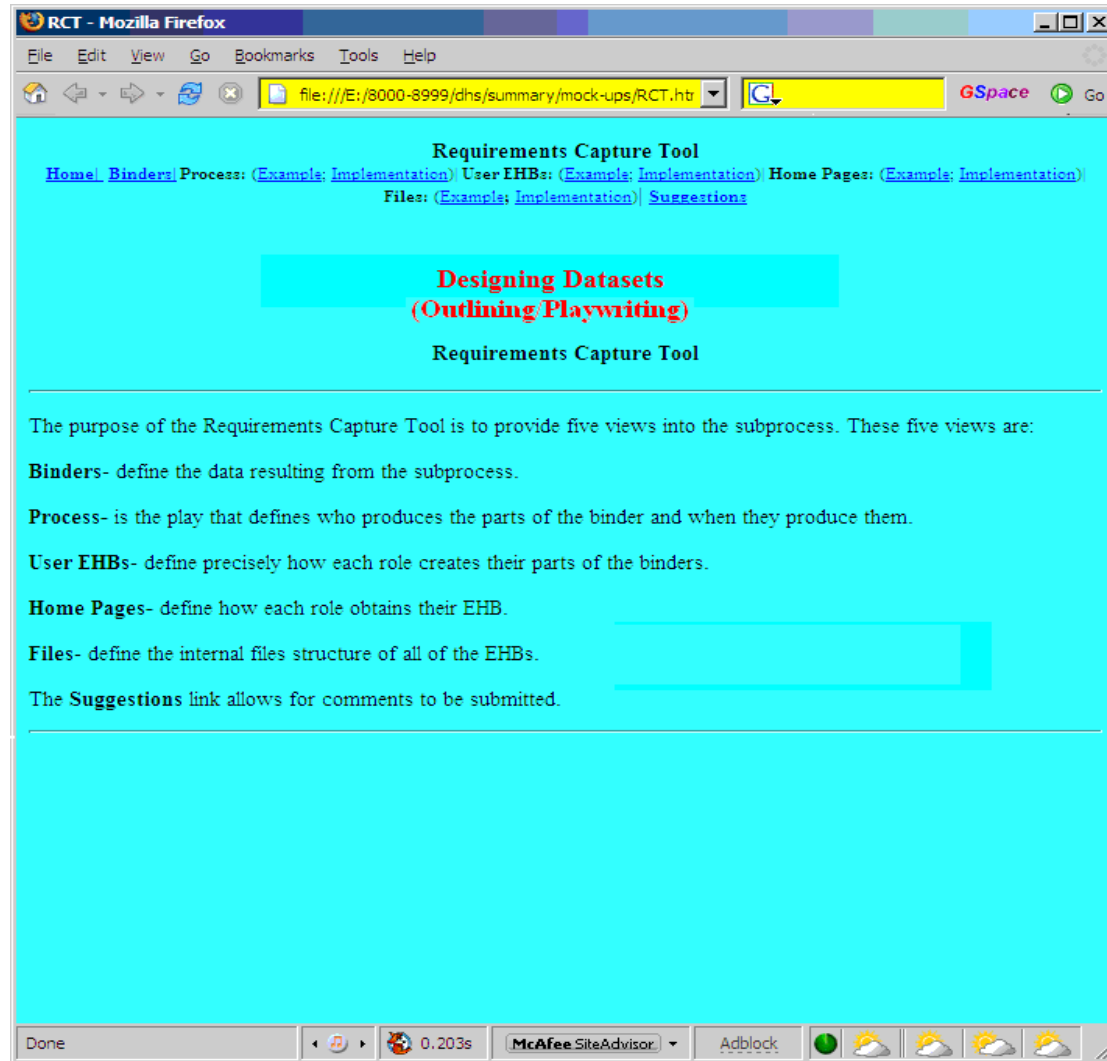
YOU SHOULD HAVE NO EXPECTATION OF PRIVACY
By continuing, you consent to your keystrokes and data content being monitored.

[NASA Privacy, Security Notices](#)

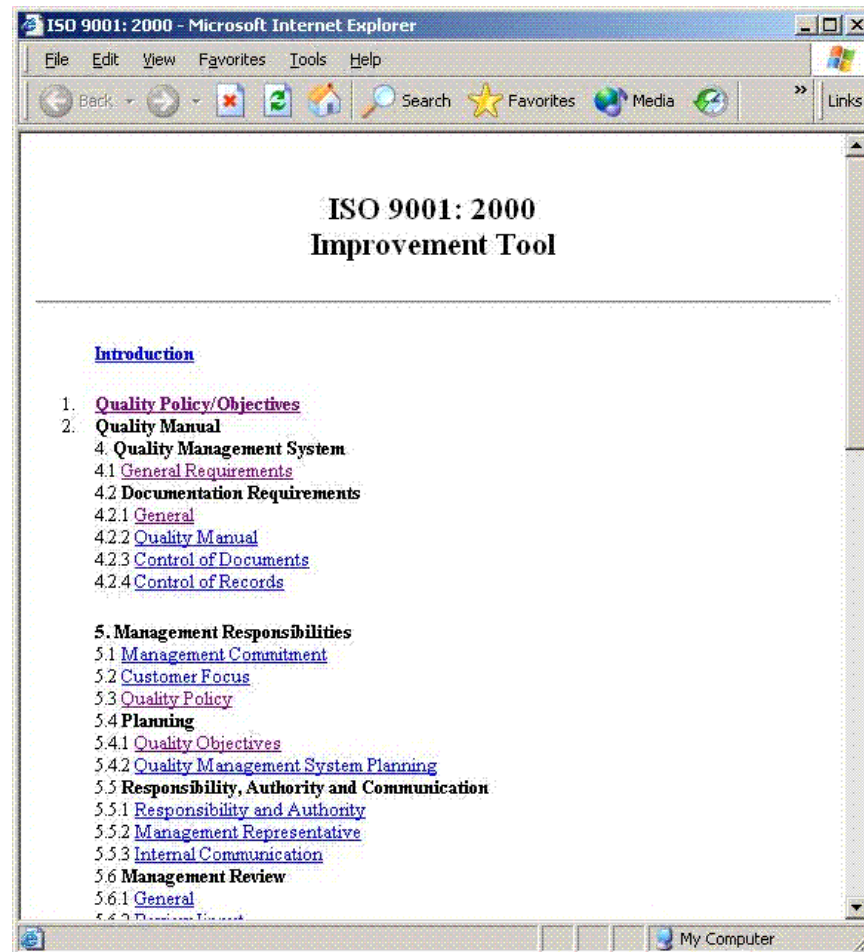
Last Modified: June 23, 2005
Curator: [Dr. Barry E. Jacobs](#)
NASA Official: [Dr. Barry E. Jacobs](#)

Now: 44°F Wed: 45°F Thu: 59°F Fri: 41°F Sat: 38°F Sun: 38°F Mon: 36°F

Requirements Capture Tools (RCTs) facilitate subprocess development.

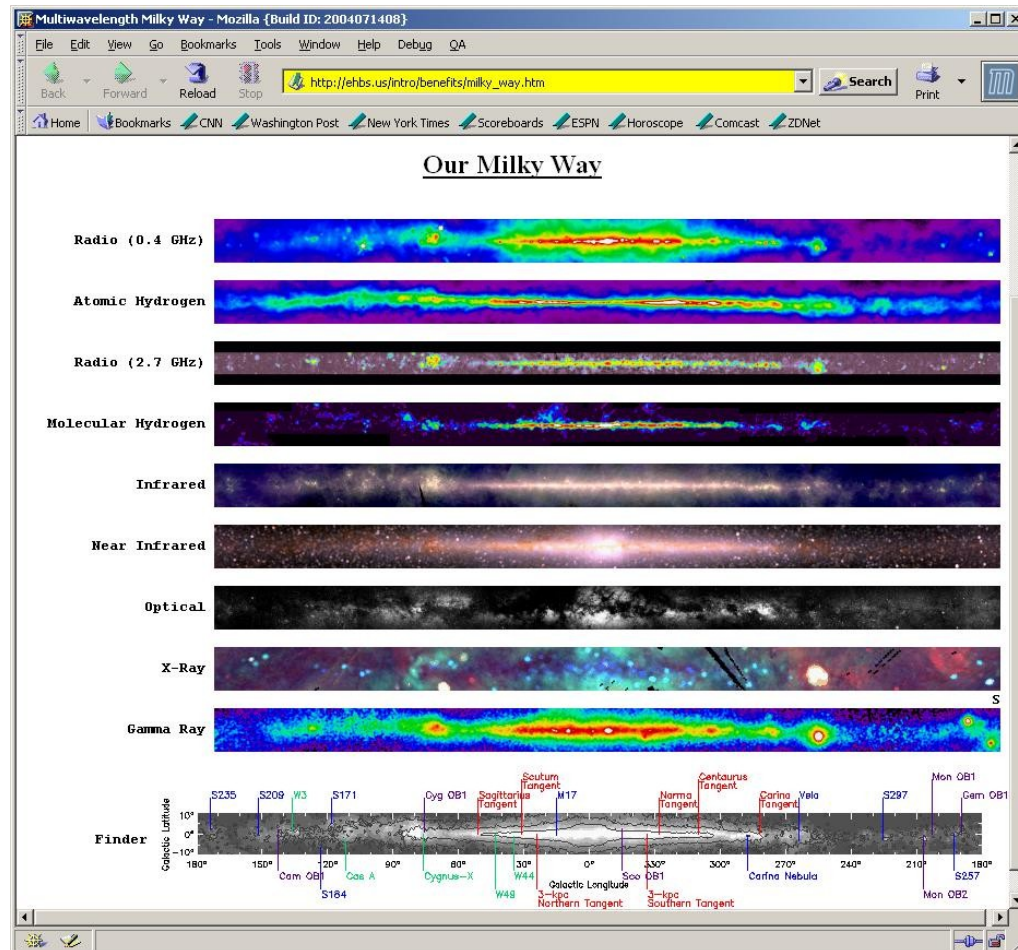


Improvement Tools facilitate subprocess improvement.



Final Thoughts

We believe that to truly understand one's universe, one must see it thru multiple “eyes” and also have tools to “communicate” these views.



All the world's a stage ...

Jaques:

**All the world's a stage,
And all the men and women merely players;
They have their exits and their entrances,
And one man in his time plays many parts,
His acts being seven ages.**

William Shakespeare

As You Like It, Act 2, Scene 7.

Some Effects of Separation

**"Men hate each other because they fear each other;
They fear each other because they don't know each other;
They don't know each other because they can't communicate with each other;
They can't communicate with each other because they are separated from each other. "**

**Dr. Martin Luther King Jr.
September 3, 1957**

Theatre of Dionysus- Athens, Greece



For More Details

