

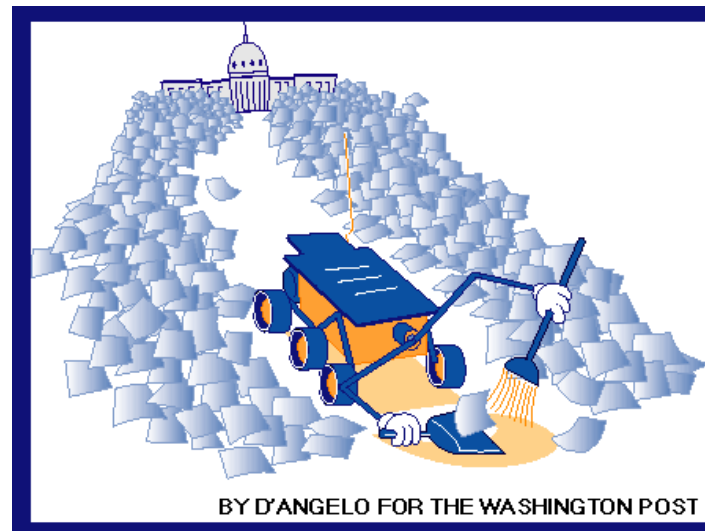
NASA Software Management Using Process Libraries and Electronic Handbooks



(Where Shakespeare Meets Freud)



Demonstration



Dr. Barry E. Jacobs
barry.e.jacobs@comcast.net

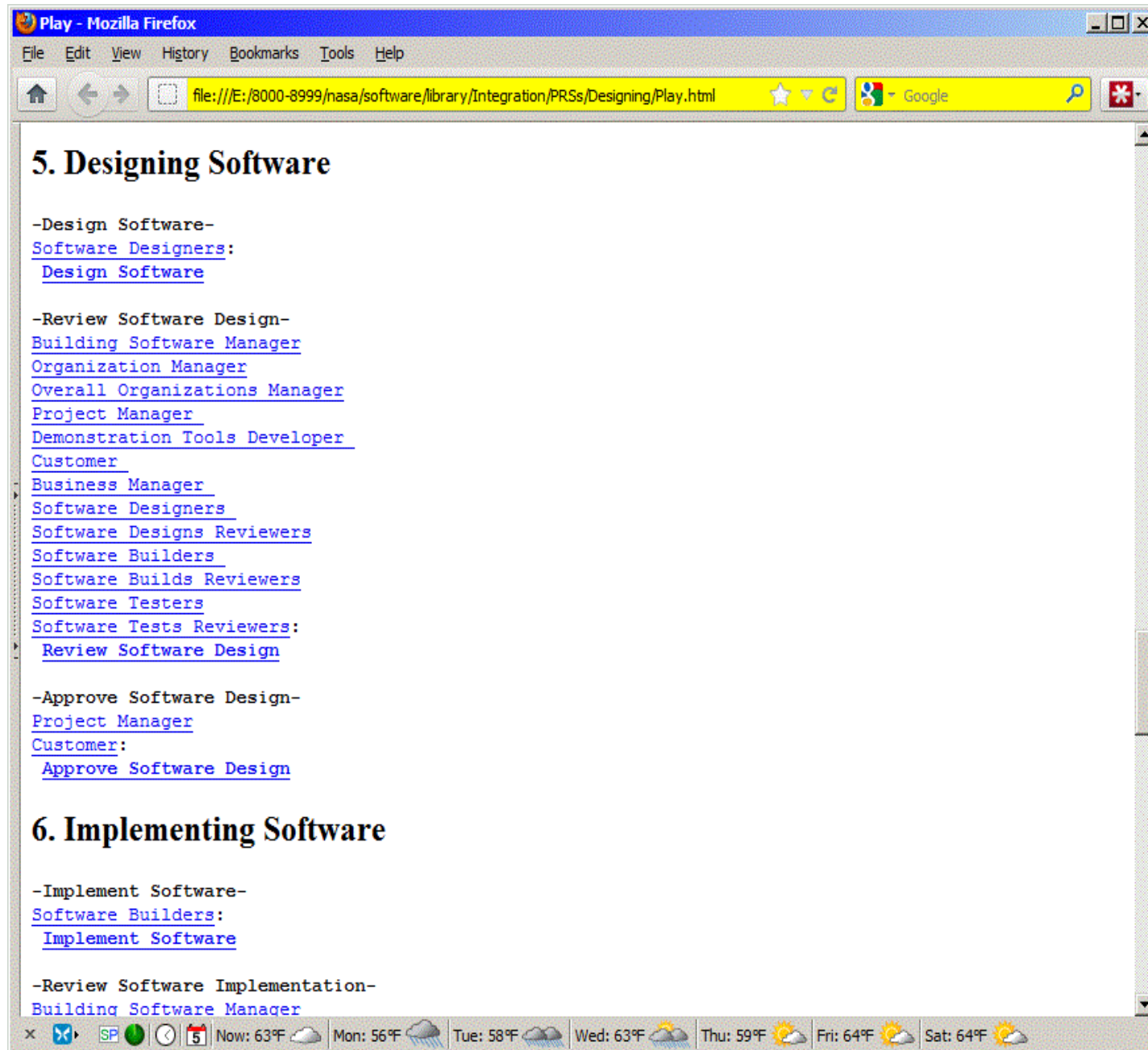
The Bottom Line:

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.



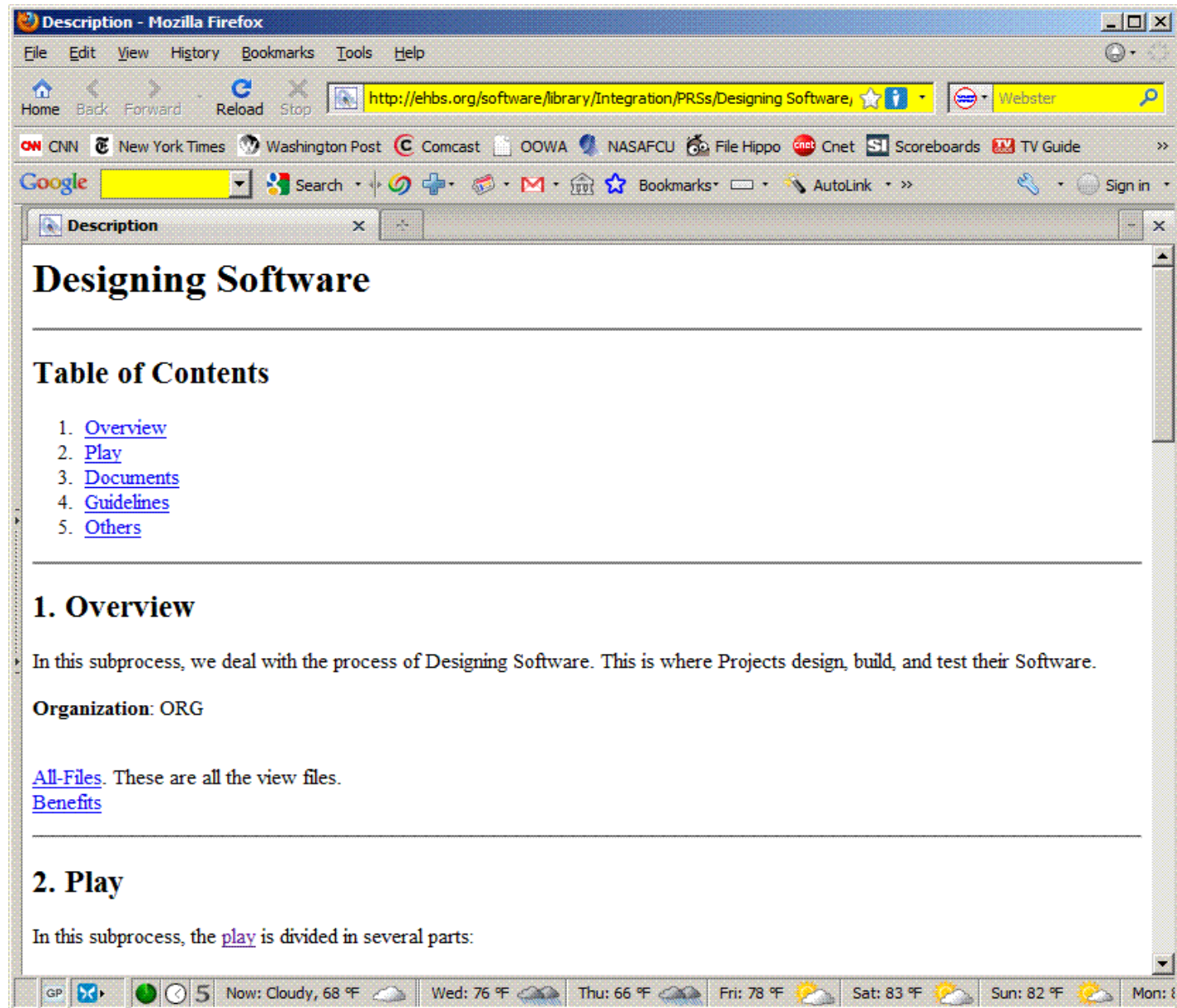
Benefits:

- 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.**

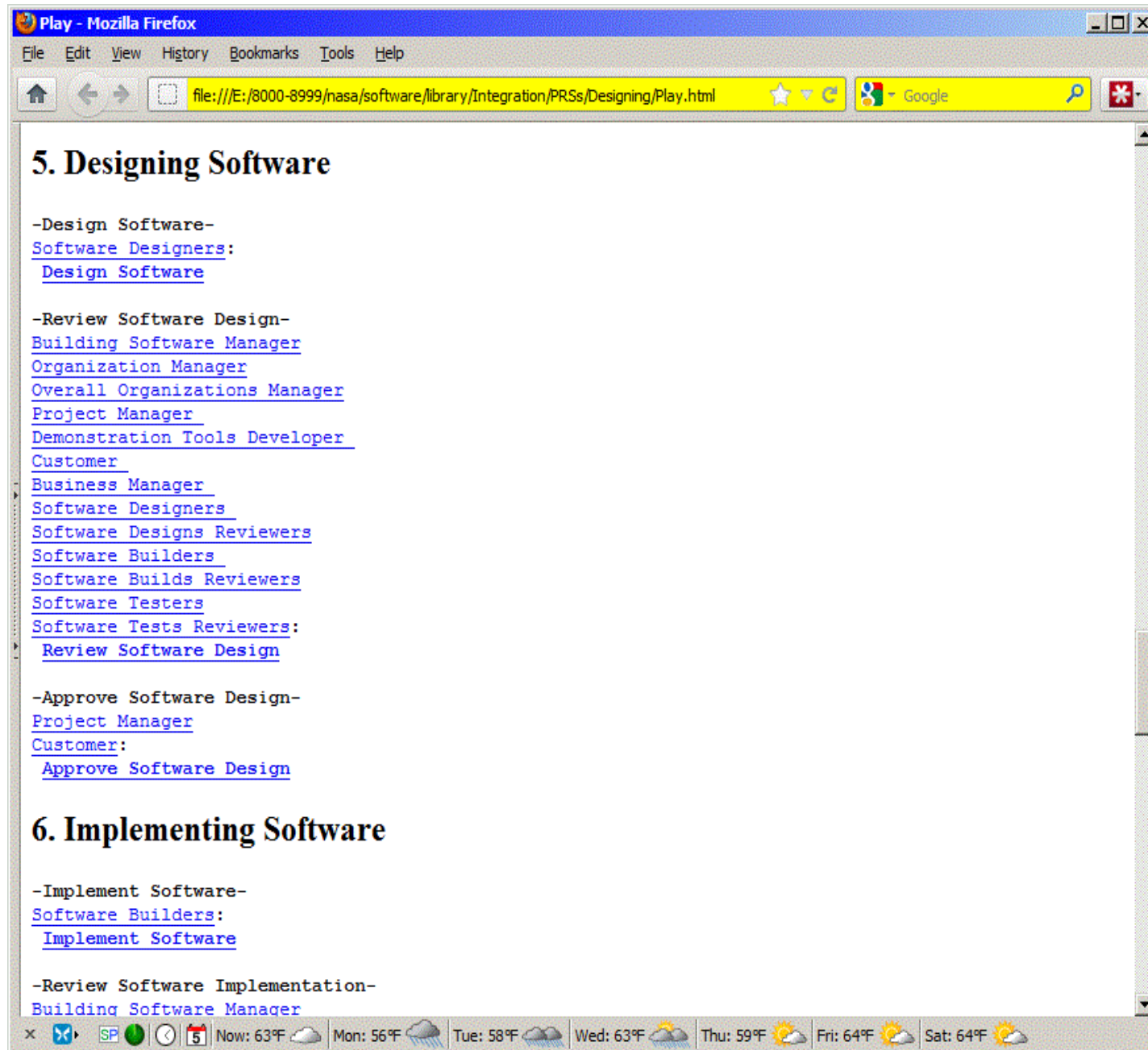
Our basic approach is to wrap organization's subprocesses in a common envelope containing "communication vehicles" that facilitate intra- and inter-organization communication.



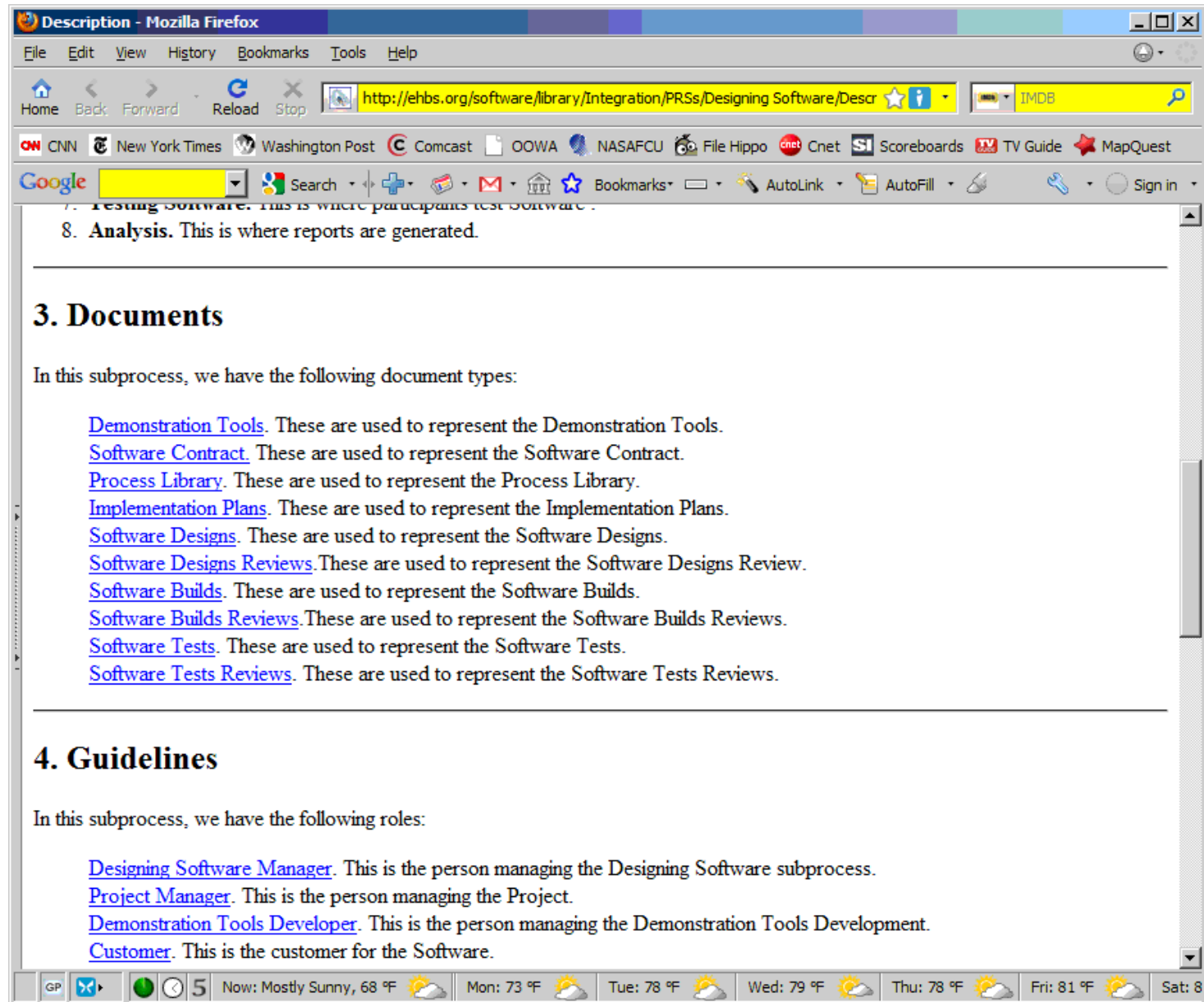
Descriptions summarize subprocesses.



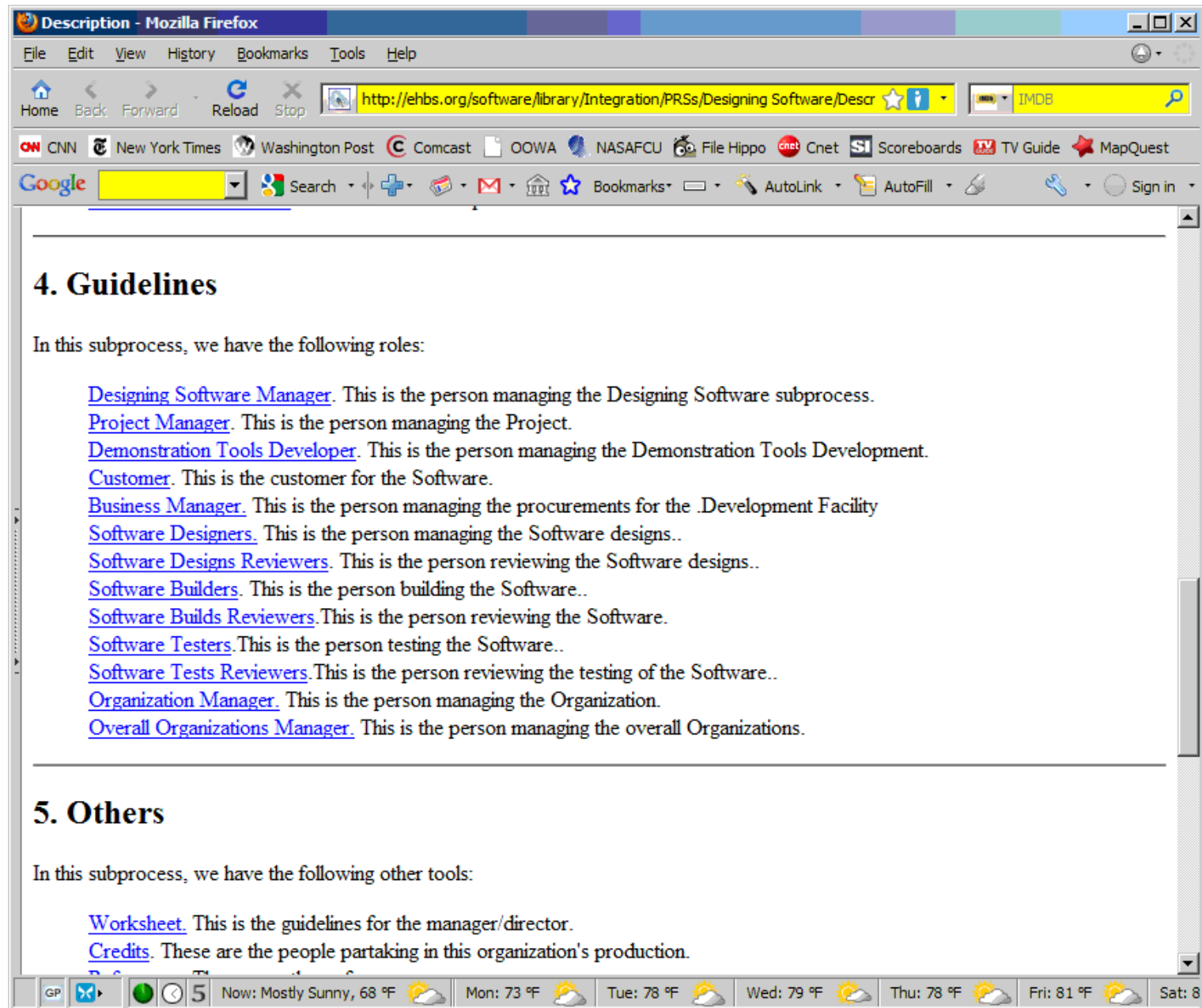
Plays describe subprocess execution.



Documents describe subprocess data.



Guidelines describe user subprocesses.



The screenshot shows a Mozilla Firefox browser window with the address bar displaying <http://ehbs.org/software/library/Integration/PRs/Designing Software/Descr>. The page content is as follows:

4. Guidelines

In this subprocess, we have the following roles:

- [Designing Software Manager](#). This is the person managing the Designing Software 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 Software.
- [Business Manager](#). This is the person managing the procurements for the .Development Facility
- [Software Designers](#). This is the person managing the Software designs..
- [Software Designs Reviewers](#). This is the person reviewing the Software designs..
- [Software Builders](#). This is the person building the Software..
- [Software Builds Reviewers](#). This is the person reviewing the Software.
- [Software Testers](#). This is the person testing the Software..
- [Software Tests Reviewers](#). This is the person reviewing the testing of the Software..
- [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.
- [Credits](#). These are the people partaking in this organization's production.

The browser's status bar at the bottom shows the date as 5, the current weather as 'Now: Mostly Sunny, 68 °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: 8.

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/software/summary/mockups/Worksheet.htm

Subprocess Worksheet

Subprocess: Designing Software

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

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 Software.	Task Lead, Subtask Lead, Subtask Member, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	08/23/07	Document Library	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
Planning	The purpose of this task is to plan the design of Software.	Task Lead, Subtask Lead, Subtask Member, 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 Software	The purpose of this task is to design the Software.	Task Lead, Subtask Lead, Subtask Member, 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 Samples	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
Subprocess 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.



Overview of NASA Software Process Library

The objective of this tool is to help NASA Software Managers (and Staff) to *quickly learn* to build and manage software. We present our approach in five bullets.

- We focus on the documents that NASA Software Managers prepare. These documents appear within various subprocesses (e.g., [1](#)) and within multiple organizations (e.g., [2](#)).
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- For each document type, we create files to help prepare the document. These files include document overview, organization, related links, structure, references, organization samples, organization contacts, and *sample documents from other organizations*. (e.g., [1](#), [2](#))
- Sample documents have three levels of access: a) Unconditionally Distributable (e.g., [1](#), [2](#)), b) Maintained In Organization Libraries (e.g., [1](#), [2](#)), and c) Proprietary (e.g., [1](#), [2](#)).
- Each organization gets worksheets for its own use. These worksheets also help add to the database as Managers go thru the subprocesses. (e.g., [1](#), [2](#))

For more information on the NASA Software Process Library see: [paper](#), [summary](#), and [other process libraries](#) .





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Now: Cloudy, 60° F



Thu: 66° F



Fri: 68° F



Sat: 76° F



Sun: 79° F



Mon: 79° F



Tue: 76° F



Subprocesses - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://lincoln.gsfc.nasa.gov/software/whatare/process.htm> Webster

Software

Product Realization Subprocesses*												
Integrated Problems-Solutions Database	Planning Software	Software Development Facility Solicitation Development	Submission	Handling	Gathering Requirements	Designing Software	Building Software	Using Software	Improving Software	Revising Software	Closing Software	Post-Closeout

(Potential Customers: Flight Projects)

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: Flight Projects, Non-NASA Customers)

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

GP 5 Now: Sunny, 82 °F Sat: 87 °F Sun: 85 °F Mon: 80 °F Tue: 85 °F Wed: 84 °F Thu: 81 °F

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

NASA Software Management Organizations - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Print Stop file:///E:/8000-8999/nasa/software/plib/Organizations.htm

NASA Software 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 (HE TE-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
Ruven Ramaty High Energy Solar Spectroscopic Imager (RHESSI)
Rosetta Mission
Ross X-ray Timing Explorer (RXTE) Mission
Solar Anomalous and Magnetospheric Particle Explorer (SAMPEX) Mission
SeaWinds
SMART 1
Solar and Heliospheric Observatory (SOHO)
Solar Radiation and Climate Experiment (SORCE)

Now: Cloudy, 60° F Thu: 66° F Fri: 68° F Sat: 76° F Sun: 79° F Mon: 79° F Tue: 76° F

Organizations Execute The Eight "Play Development" Stages - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Organizations Execute The Eight "Pl... X +

ehbs.org/intro/summary/Eight-Stages.html Wikipedia (en)

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.

Silver Spring, MD 20902, USA: 95°F Sun: 92°F Mon: 88°F Tue: 88°F Wed: 88°F Thu: 90°F Fri: 88°F

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 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ehbs.org/intro/summary/Important Human Factor Issues/

Google

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 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://ehbs.org/intro/summary/Telephone Game Syndrome.htm

YouTube Feedback

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

A group of nine business professionals (seven men and two women) are standing in a line. Each person has a speech bubble above their head that says "View". The speech bubbles are connected by lines to the person's mouth. The group is diverse in age and appearance. At the far left and far right of the group, on the floor, are two black rotary telephones. The background is plain white.

Silver Spring, MD 20902, USA: 54°F Tue: 61°F Wed: 58°F Thu: 51°F Fri: 47°F

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.

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NASA Software Process Library - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://lincoln.gsfc.nasa.gov/software/plib/> Webster

NASA Software Process Library

- [Overview \(Demo\)](#)
- [Integrated Problems-Solutions Database](#)
- [Software Development Facility Guidelines Development](#)
- [Planning Software](#)
- [Solicitation Development](#)
- [Submission](#)
- [Handling](#)
- [Gathering Requirements](#)
- [Designing Software](#)
- [Building Software](#)
- [Using Software](#)
- [Improving Software](#)
- [Revising Software](#)
- [Closing Software](#)
- [Post-Closeout](#)

GP 5 Now: Sunny, 79 °F Sat: 87 °F Sun: 85 °F Mon: 80 °F Tue: 85 °F Wed: 84 °F Thu: 81 °F

Views - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///E:/8000-8999/nasa/software/summary/mockups/views.htm

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

Google Search

Views

Total 30 Entries

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

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

[Create View](#)

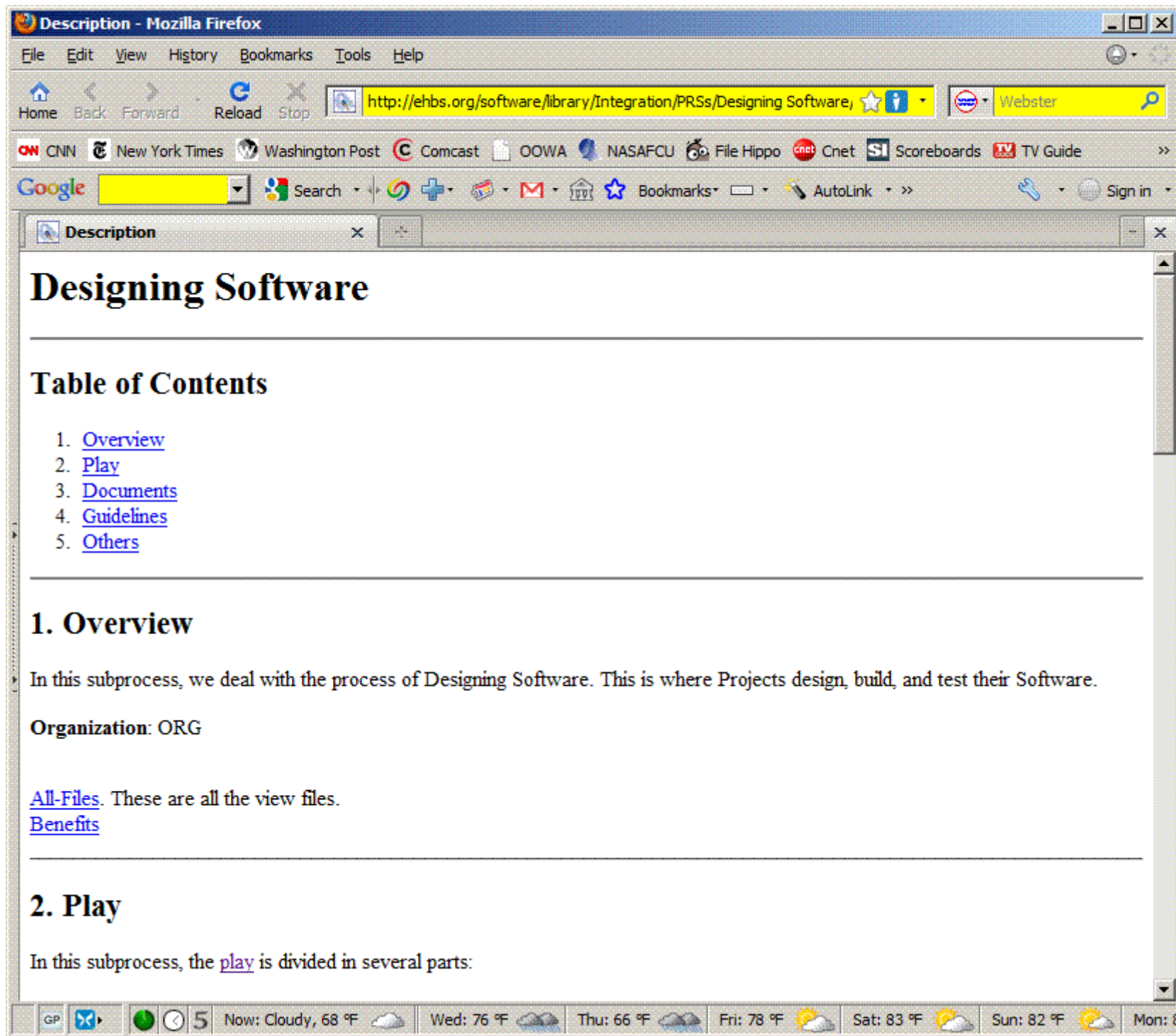
View	Steps
ASTRO-E2 Don Margolies (Don.Margolies@nasa.gov)	Update Copy Delete
CHIPS Dave Pierce (Dave.Pierce@nasa.gov)	Update Copy Delete
CINDI/TWINS Jim Byrd (Jim.Byrd@nasa.gov)	Update Copy Delete
Constellation-X Liz Citri (Liz.Citri@nasa.gov)	Update Copy Delete
ESDIS MaryAnn Esfandiari (MaryAnn.Esfandiari@nasa.gov)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

Done

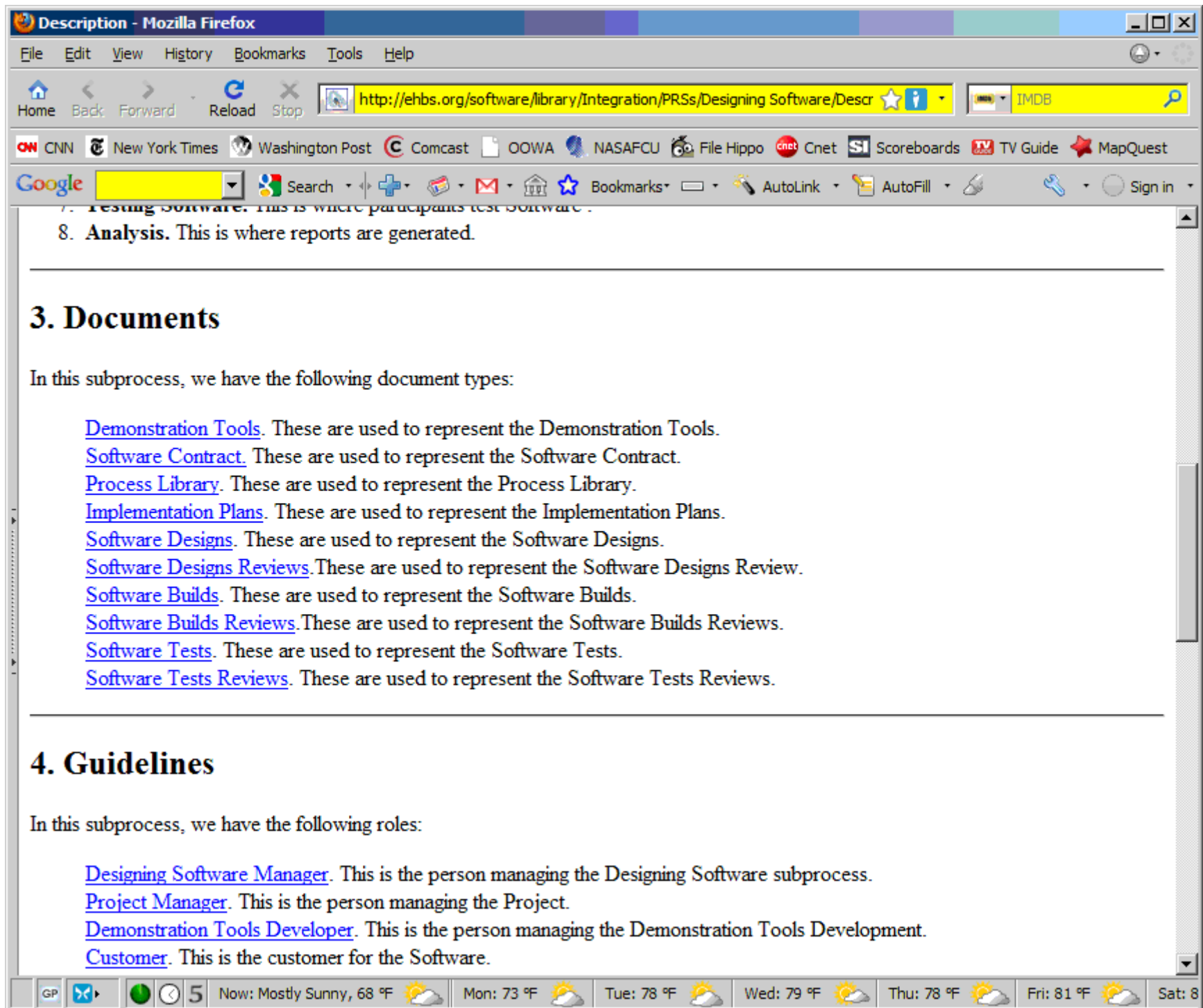
Now: Mostly Sunny, 69° F Sat: 76° F Sun: 82° F Mon: 78° F Tue: 74° F Wed: 69° F

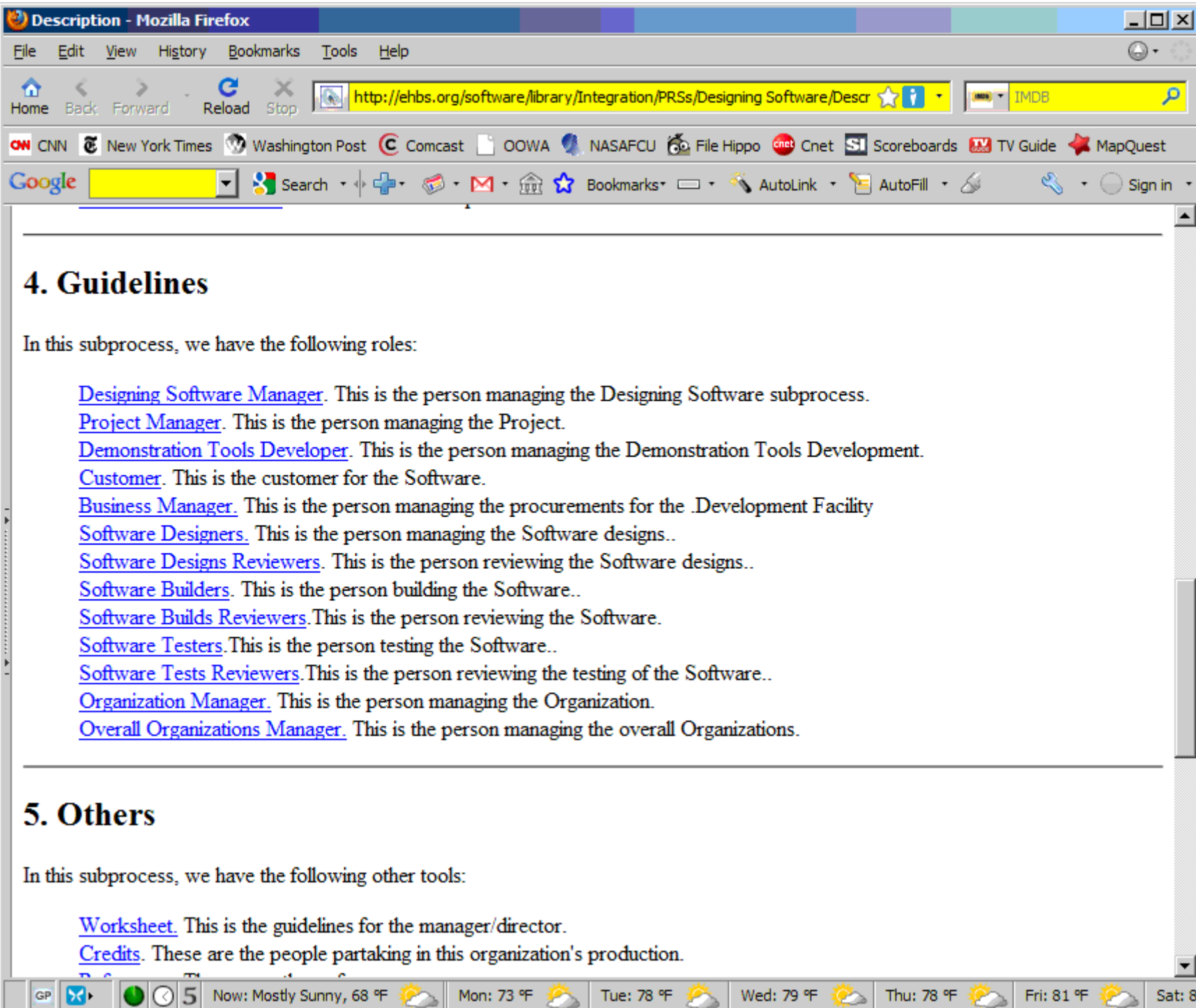
Our basic approach is to wrap organization's subprocesses in a common envelope containing "communication vehicles" that facilitate intra- and inter-organization communication.











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/software/summary/mockups/Worksheet.htm

Subprocess Worksheet

Subprocess: Designing Software

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

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)
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Planning	The purpose of this task is to plan the design of Software.	Task Lead, Subtask Lead, Subtask Member, 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 Software	The purpose of this task is to design the Software.	Task Lead, Subtask Lead, Subtask Member, 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 Samples	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 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///E:/8000-8999/nasa/flightprojects/summary/mock-ups/References.html

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

Google Search RS

Bookmarks PageRank Settings

References

[Program/Project On-Line Library and Resource Information Sustm \(Polaris\)](#)

[NPR 7120.5D \(NODIS\)](#)

Templates:

[NPR 7123.1A \(NODIS\)](#)

[Program Plan](#)

[Program Life Cycle Diagram](#)

[Project Plan](#)

[Project Life Cycle Diagram](#)

[Formulation Authorization Doc](#)

[Program Gate Products](#)

[Program Commitment Agreement](#)

[Project Gate Products](#)

Changes/Waivers:

[Project Categorization](#)

[General Waivers](#)

[Key Decision Points](#)

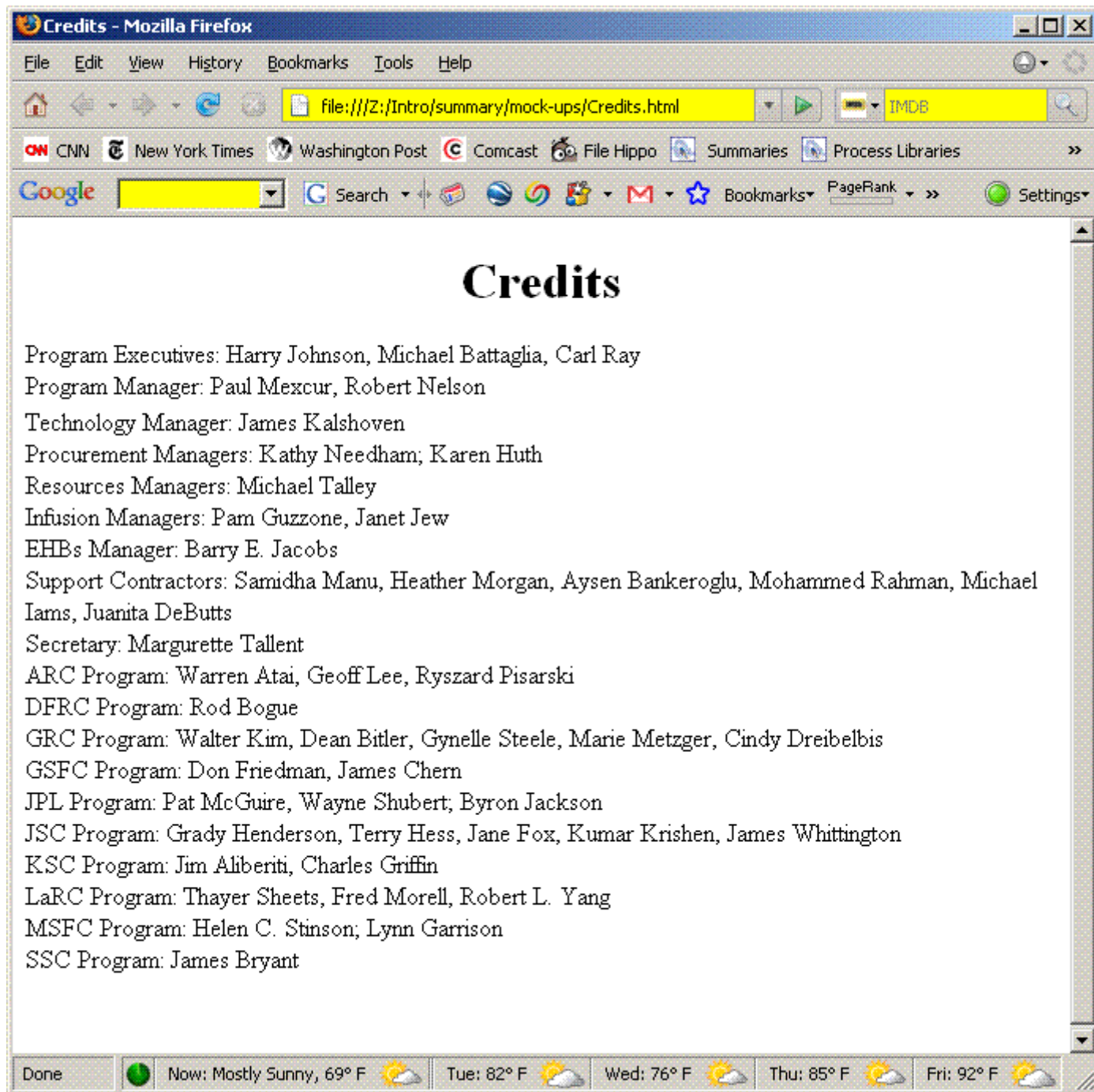
[Waivers to NPR 7120.5D](#)

[Technical Authority](#)

[Waiver Form](#)

Done

Now: Cloudy, 70° F Mon: 80° F Tue: 80° F Wed: 77° F Thu: 80° F Fri: 88° F



Credits

Program Executives: Harry Johnson, Michael Battaglia, Carl Ray

Program Manager: Paul Mexcur, Robert Nelson

Technology Manager: James Kalshoven

Procurement Managers: Kathy Needham, Karen Huth

Resources Managers: Michael Talley

Infusion Managers: Pam Guzzone, Janet Jew

EHBs Manager: Barry E. Jacobs

Support Contractors: Samidha Manu, Heather Morgan, Aysen Bankeroglu, Mohammed Rahman, Michael Iams, Juanita DeButts

Secretary: Margurette Tallent

ARC Program: Warren Atai, Geoff Lee, Ryszard Pisarski

DFRC Program: Rod Bogue

GRC Program: Walter Kim, Dean Bitler, Gynelle Steele, Marie Metzger, Cindy Dreibelbis

GSFC Program: Don Friedman, James Chern

JPL Program: Pat McGuire, Wayne Shubert, Byron Jackson

JSC Program: Grady Henderson, Terry Hess, Jane Fox, Kumar Krishen, James Whittington

KSC Program: Jim Aliberiti, Charles Griffin

LaRC Program: Thayer Sheets, Fred Morell, Robert L. Yang

MSFC Program: Helen C. Stinson, Lynn Garrison

SSC Program: James Bryant

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

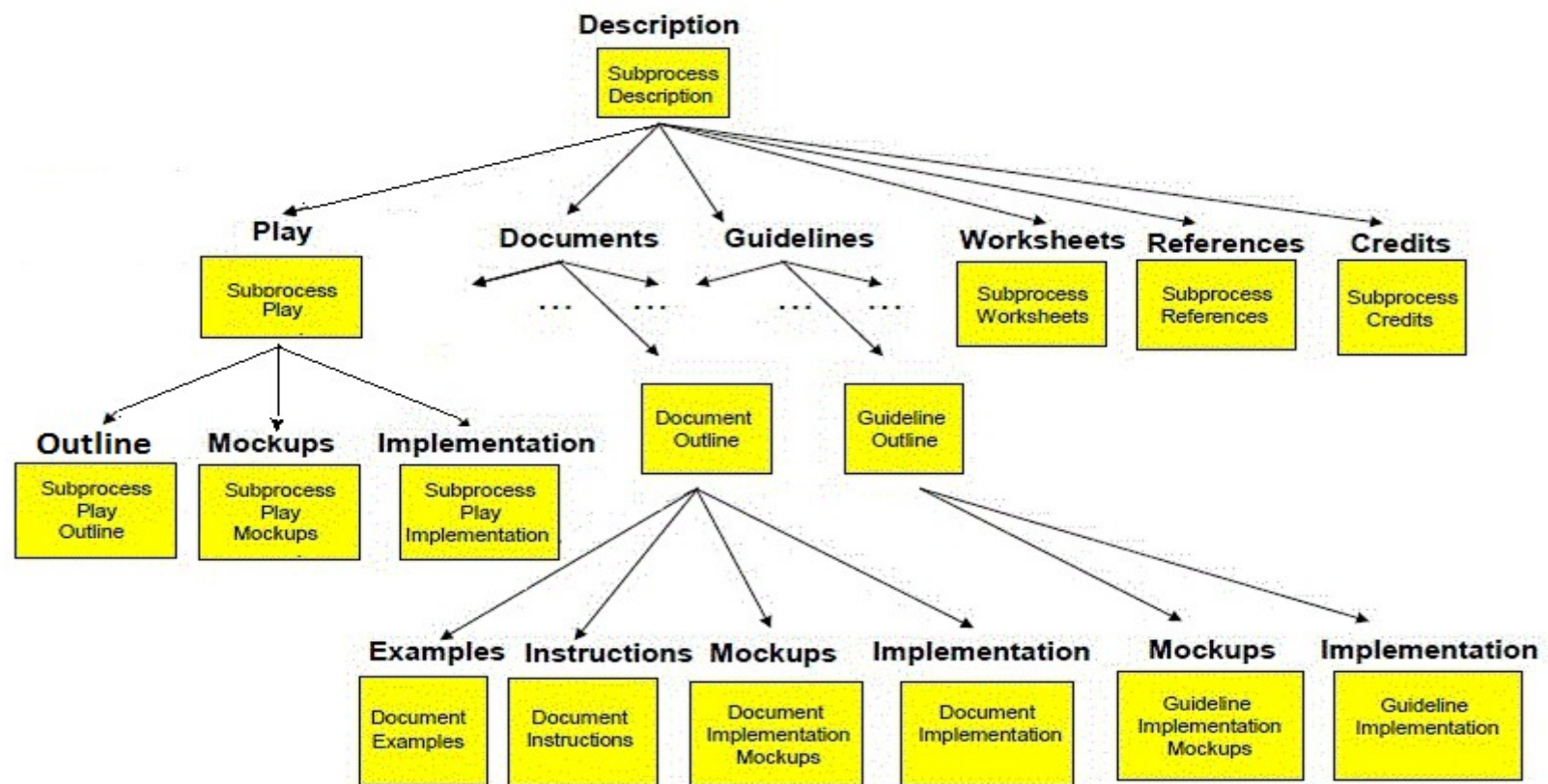
ehbs.org/intro/summary/stages2.html

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.


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




Shakespeare Meets Freud - Mozilla Firefox 4.0 Beta 3

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Shakespeare Meets Freud



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

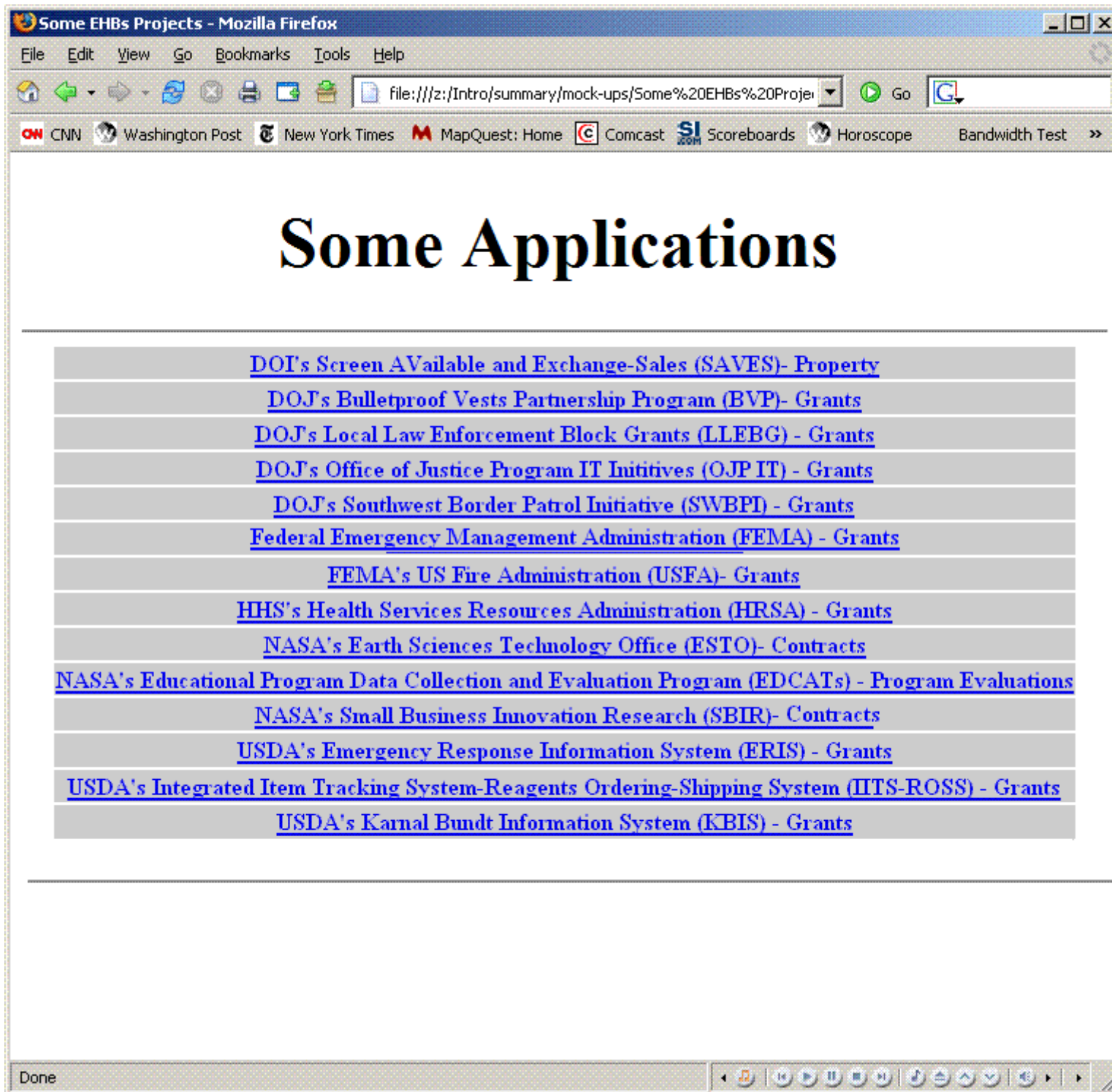


- **In Process Libraries (PLs), subprocesses are represented as "plays" where "actors" communicate thru the Internet. Each organization puts on its own "productions". For each role, Electronic Handbooks (EHBs) (also called Guidelines) guide "actors" thru their parts. Managers are "directors" using Worksheets 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]**

Done

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 - Mozilla Firefox

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Home Back Forward Reload Stop <http://ehbs.org/intro/summary/Basic Principles.htm> ★ ⓘ IMDB 🔍

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 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.

SF 5 Now: Cloudy, 32 °F Tue: 38 °F Wed: 43 °F Thu: 47 °F Fri: 52 °F Sat: 44 °F

Subprocess/Play Developments that are supported - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://ehbs.org/intro/summary/play-development.htm> ★ ⓘ IMDB 🔍

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.

SF 5 Now: Cloudy, 32 °F Tue: 38 °F Wed: 43 °F Thu: 47 °F Fri: 52 °F Sat: 44 °F

Process Library Operations that are supported - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://ehbs.org/intro/summary/operations.htm> IMDB

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.

SP X Now: Cloudy, 34 °F Tue: 38 °F Wed: 43 °F Thu: 47 °F Fri: 52 °F Sat: 44 °F S

Overview of NASA Software Process Library

The objective of this tool is to help NASA Software Managers (and Staff) to *quickly learn* to build and manage software. We present our approach in five bullets.

- We focus on the documents that NASA Software Managers prepare. These documents appear within various subprocesses (e.g., [1](#)) and within multiple organizations (e.g., [2](#)).
- For each subprocess, we create a directory of documents for that subprocess. (e.g., [1](#), [2](#))
- For each document type, we create files to help prepare the document. These files include document overview, organization, related links, structure, references, organization samples, organization contacts, and *sample documents from other organizations*. (e.g., [1](#), [2](#))
- Sample documents have three levels of access: a) Unconditionally Distributable (e.g., [1](#), [2](#)), b) Maintained In Organization Libraries (e.g., [1](#), [2](#)), and c) Proprietary (e.g., [1](#), [2](#)).
- Each organization gets worksheets for its own use. These worksheets also help add to the database as Managers go thru the subprocesses. (e.g., [1](#), [2](#))

For more information on the NASA Software Process Library see: [paper](#), [summary](#), and [other process libraries](#) .

Document - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://ehbs.org/software/library/Integration/PRs/Designing Software/> Webster

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

Google Search Bookmarks AutoLink Sign in

Designing Software

Software Designs

Document

Overview

The purpose of Software Designs is to provide Software Designs documents for the Designing Software subprocess.

Organization: ORG

Document

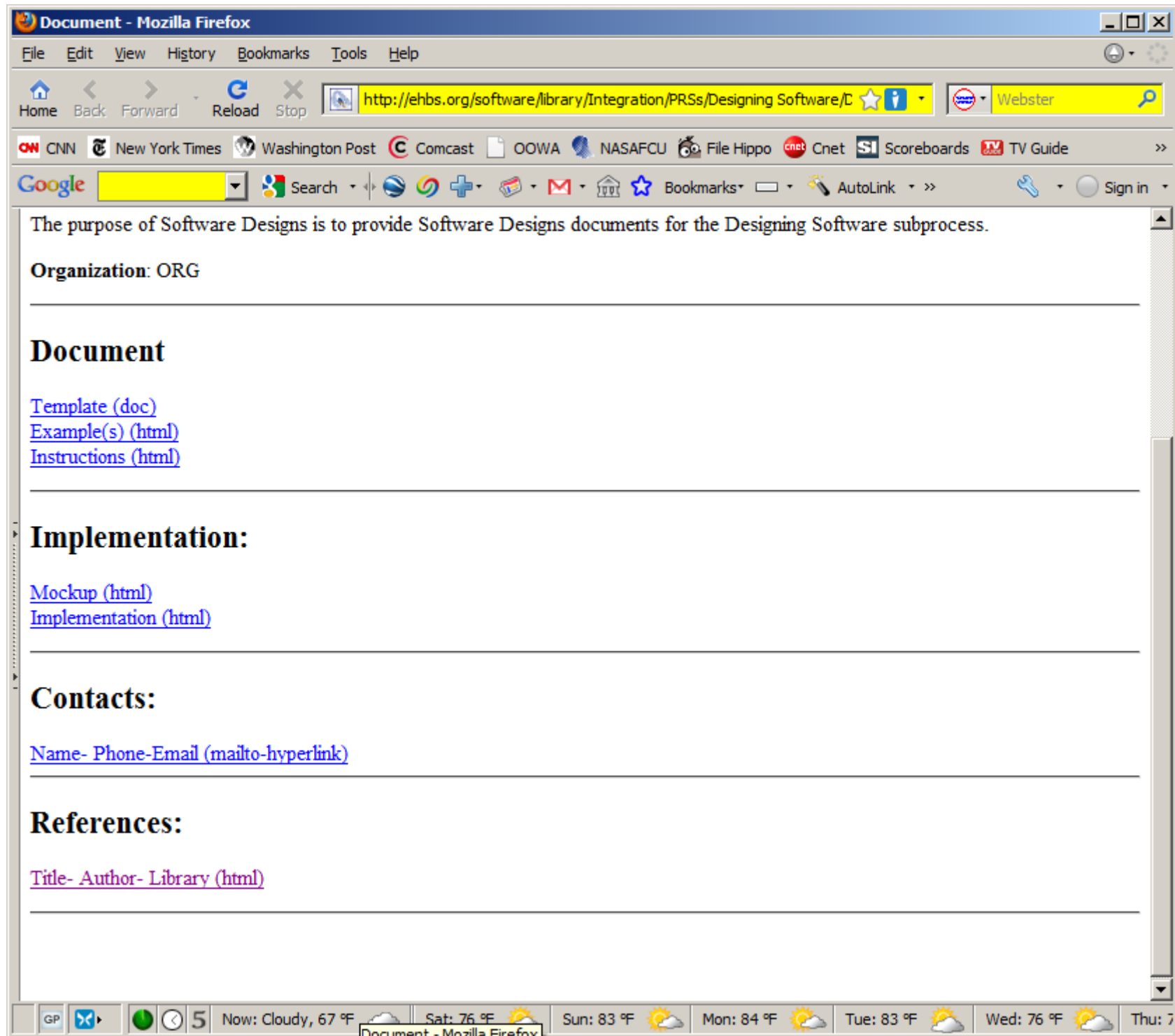
[Template \(doc\)](#)
[Example\(s\) \(html\)](#)
[Instructions \(html\)](#)

Implementation:

[Mockup \(html\)](#)
[Implementation \(html\)](#)

Contacts:

GP 5 Now: Cloudy, 67 °F Sat: 76 °F Sun: 83 °F Mon: 84 °F Tue: 83 °F Wed: 76 °F Thu: 7



Fetch Integration

Read Integration

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

Samples From Views

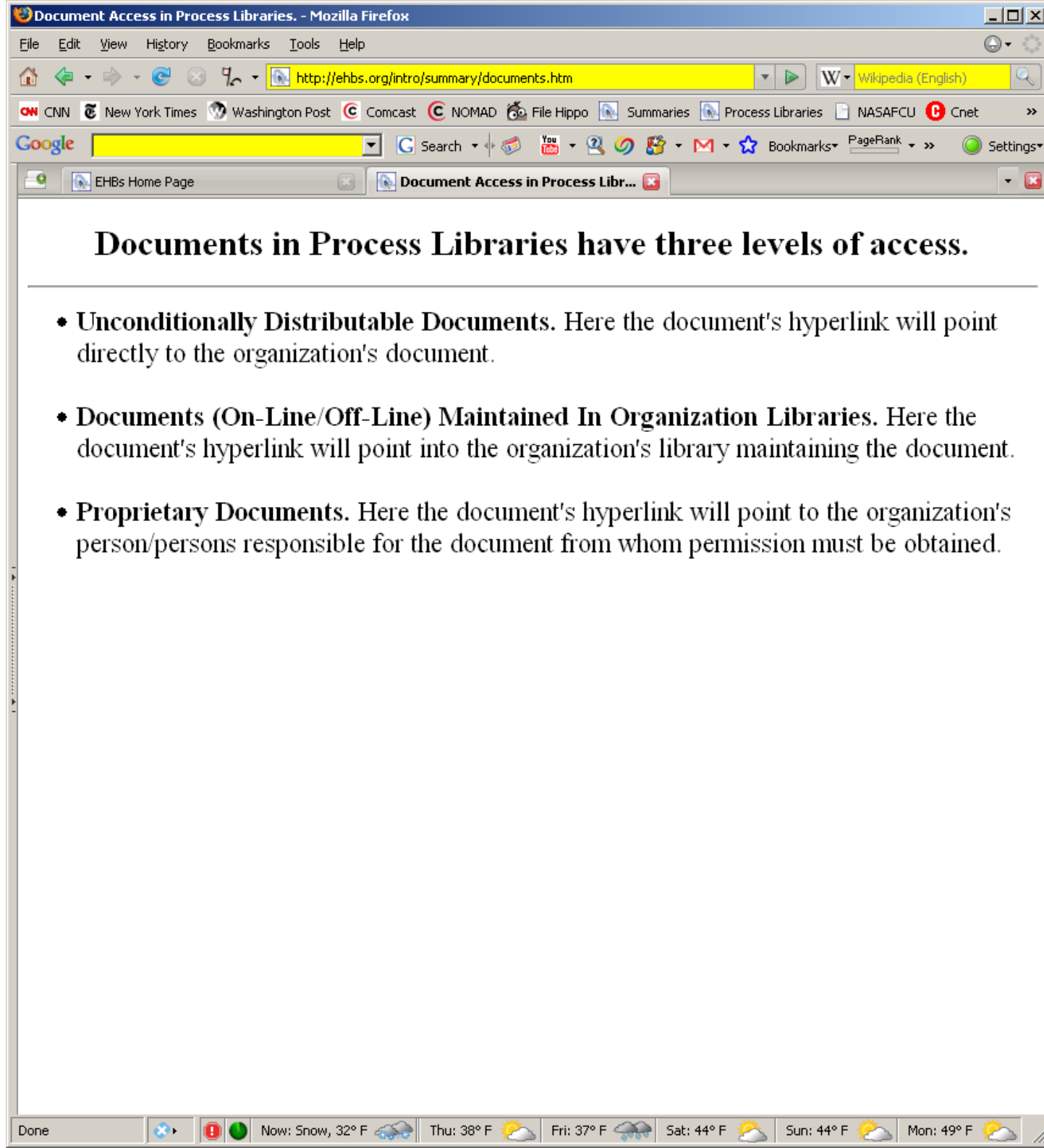
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CHIPS Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
CINDI/TWINS Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
Constellation-X Fetch - (Size: 10 KB)	Date Created: 23-Jun-2005 Date Updated: 23-Jun-2005
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
CALEX	Date Created: 23-Jun-2005

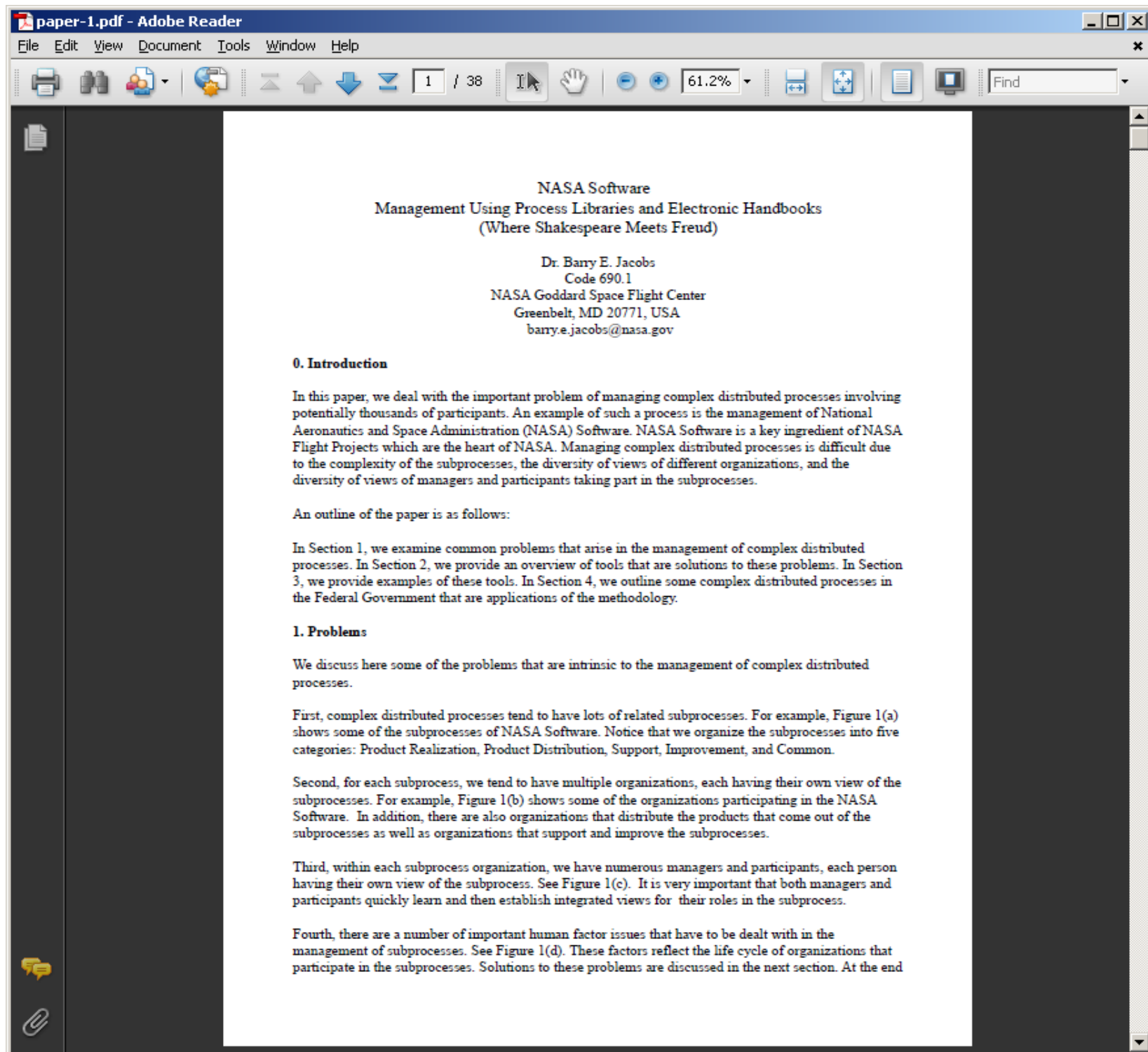
Overview of NASA Software Process Library

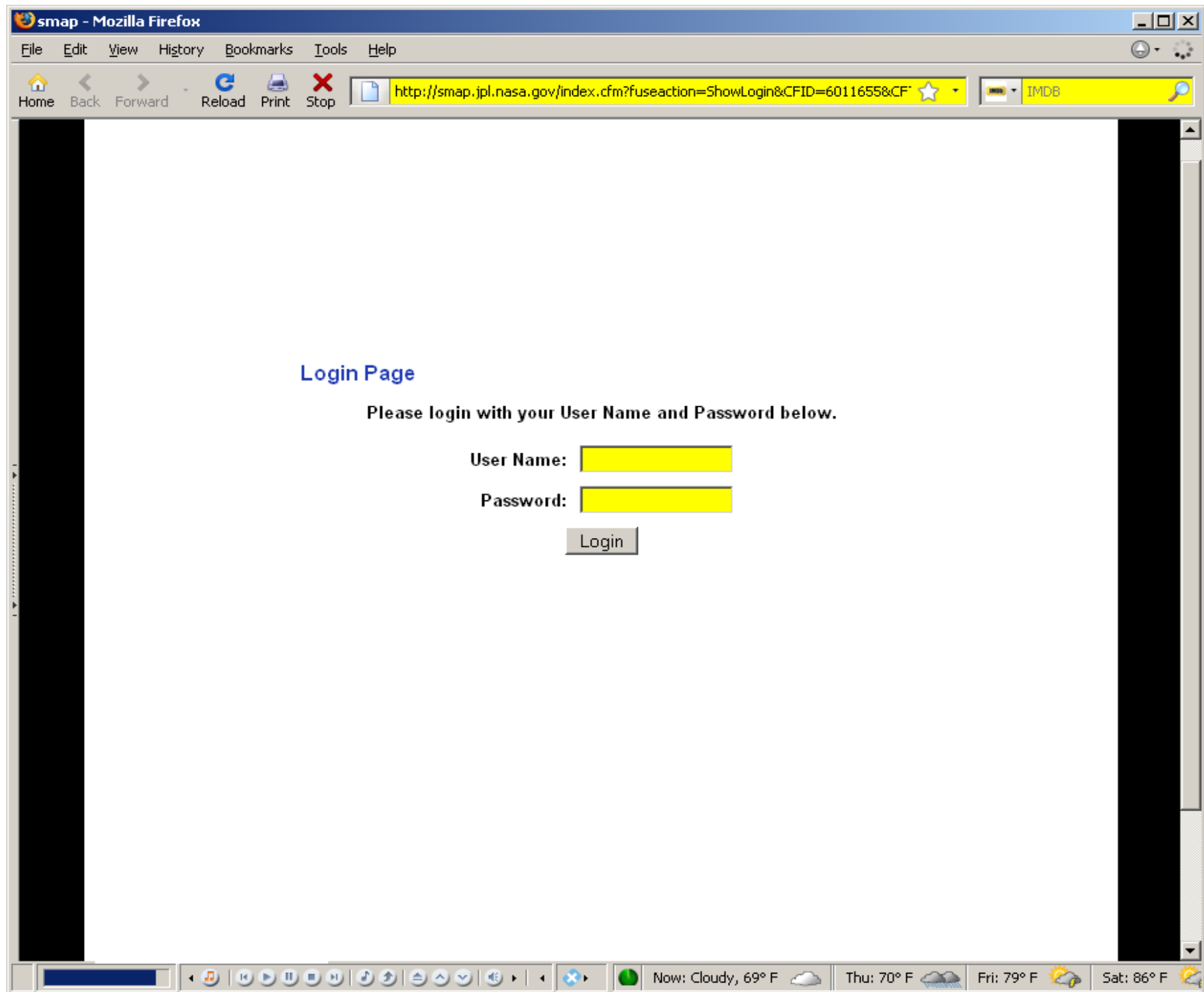
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For more information on the NASA Software Process Library see: [paper](#), [summary](#), and [other process libraries](#) .







Compose: Please send me a copy of your project's proprietary MDR Package

File Edit View Insert Format Options Tools Help

Send Contacts Spell Attach Security Save

From: Barry E. Jacobs <barry.e.jacobs@nasa.gov> - BEJ@nasa

To: Mary.T.Smith@jpl.nasa.gov

To:

Subject: Please send me a copy of your project's proprietary MDR Package

Preformat Variable Width

Please send me a copy of your project's proprietary:

Package

Thanks,

Barry

|

--

Dr. Barry E. Jacobs
Code 690.1
NASA Goddard Space Flight Center
Greenbelt, MD 20771
barry.e.jacobs@nasa.gov

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Subprocess Worksheet

Subprocess: Designing Software

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

Organization: IMAGE

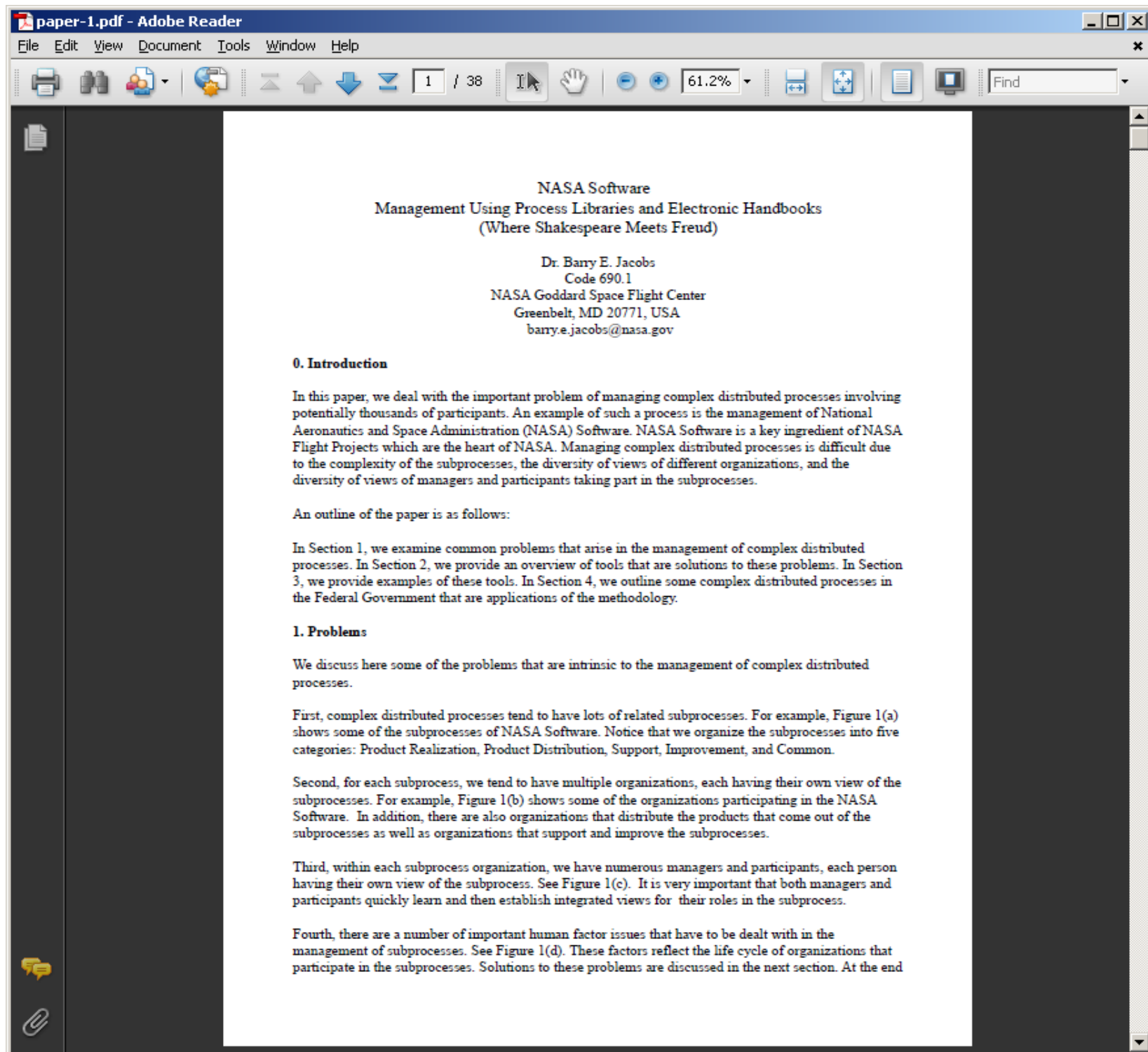
Task	Purpose	Suggested Roles	Task Lead(s)	Estimated Completion Date	Actual Completion Date	Documents					
						Document	Instructions and Samples	Document Lead(s)	Estimated Completion Date	Actual Completion Date	Document Location(s)
Administration	The purpose of this task is to administer the design of Software.	Task Lead, Subtask Lead, Subtask Member, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	08/23/07	Document Library	Instructions and Samples	James Green	06/23/07	07/23/07	Library: NS2034
Planning	The purpose of this task is to plan the design of Software.	Task Lead, Subtask Lead, Subtask Member, 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 Software	The purpose of this task is to design the Software.	Task Lead, Subtask Lead, Subtask Member, Reviewer, Approval Official, Project Manager, Documents Manager	James Green	07/23/07	078/23/07	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

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For more information on the NASA Software Process Library see: [paper](#), [summary](#), and [other process libraries](#) .



National Aeronautics and Space Administration (NASA) Software Management - Mozilla Firefox

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ehbs.org/nasasoftware/summary/index.html

NASA Software Management Using Process Libraries and Electronic Handbooks

(Where Shakespeare Meets Freud)

Summary

(Click Here for: [PDF](#), [PPT](#))

([Quick Summary](#))

([Paper](#))

([Demonstration](#))

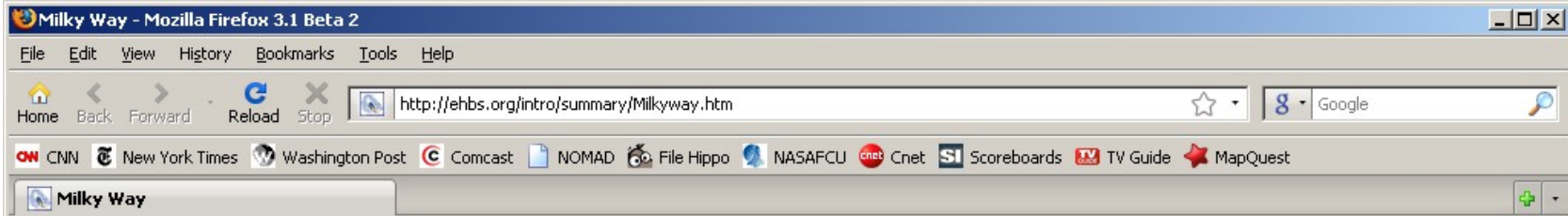
([Subprocesses and Their Documentations](#))

([Demonstration Tool](#))

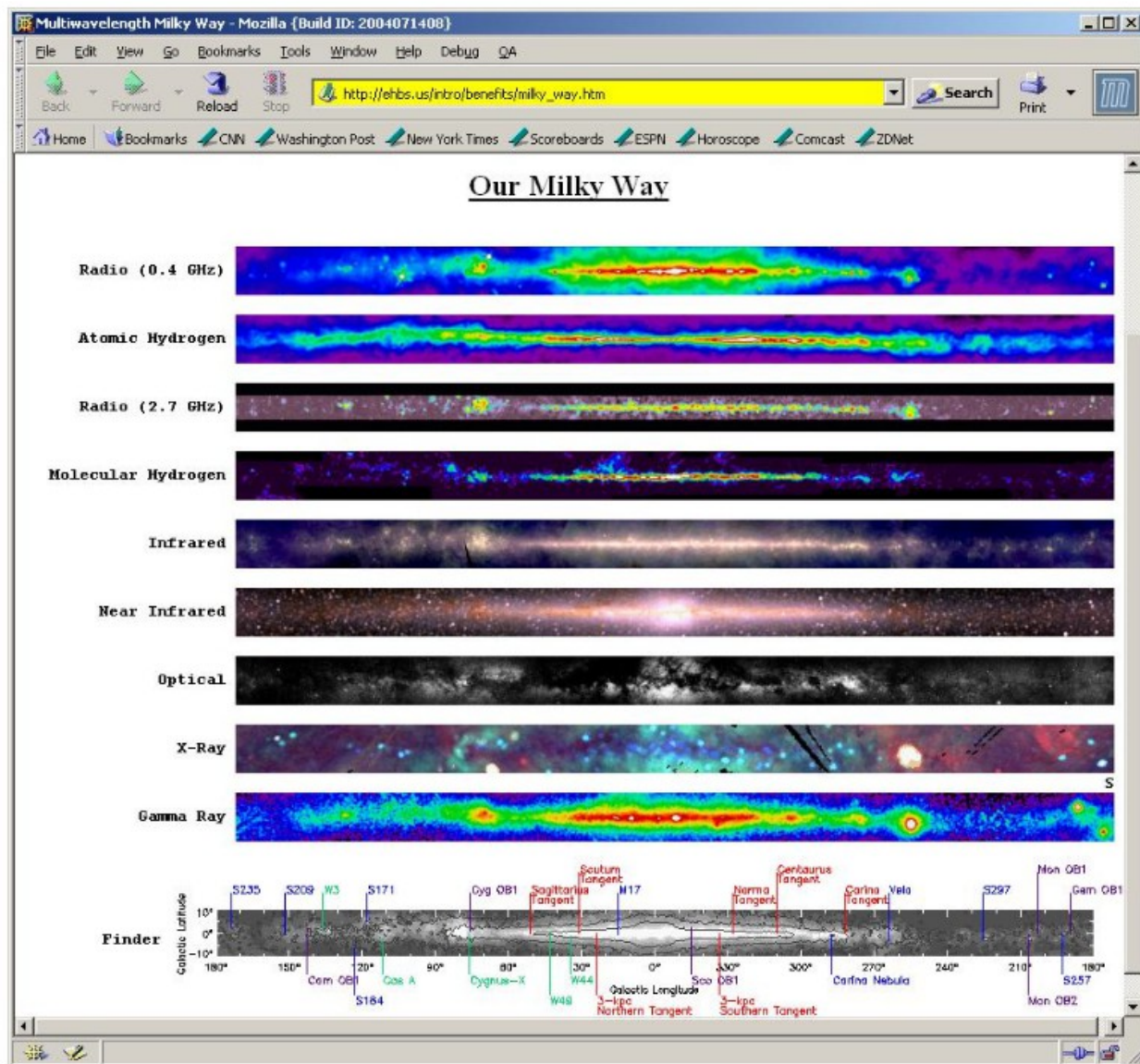
([Home Page](#))

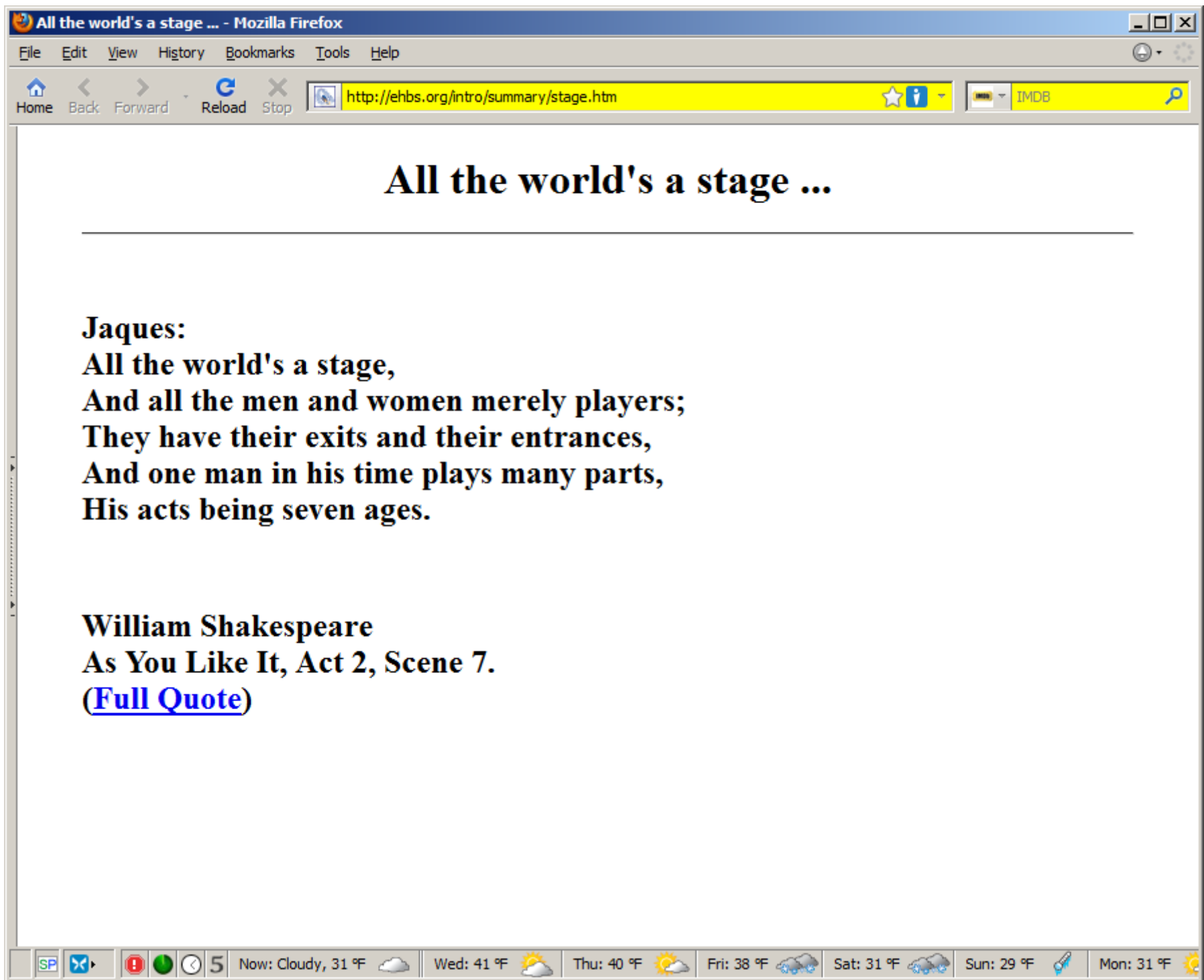
- [Cover](#)
- [The Bottom Line: Provide editable and cost-saving process documentation tools for process developers and participants to help them quickly and effectively learn, adapt, test, teach, and work together. These tools may be added to new or existing systems.](#)
- [Objective: Develop Internet-based tools to support the paperless documentation and management of complex distributed processes.](#)
- [Plays describe subprocess execution.](#)
- [Our basic approach is to wrap organization's subprocesses in a common envelope containing "communication vehicles" that facilitate learning plus intra-organization communication.](#)
- [Outline of Presentation.](#)
- [Objective: Develop Internet-based tools to support the paperless documentation and management of complex distributed processes.](#)
- [Plays describe subprocess execution.](#)
- [Organizations provide different views of the subprocesses, some of which may be proprietary.](#)
- [People in organizations provide different views of the subprocesses.](#)
- [Organizations generate Subprocess Life-Cycle Views.](#)
- [The "Game of Telephone" Syndrome: where people pass-on only parts of the "message".](#)

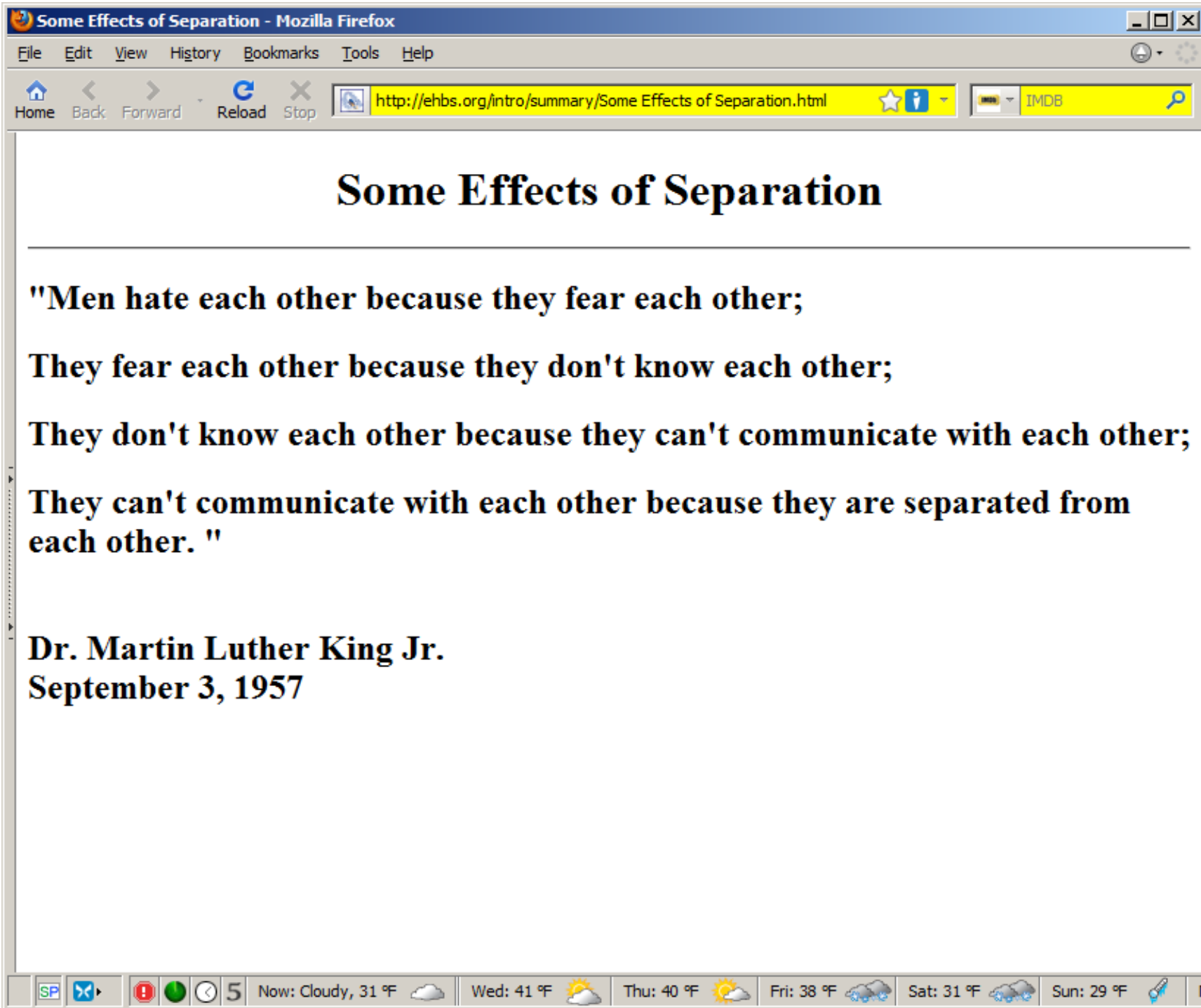
Now: 45°F Thu: 59°F Fri: 41°F Sat: 38°F Sun: 38°F Mon: 36°F Tue: 45°F



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







Theatre of Dionysus- Athens, Greece



For More Details

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EHBs Home Page

ehbs.us

Search

Complex Process Management Using PLs and EHBs [Where Shakespeare Meets Freud]

Home

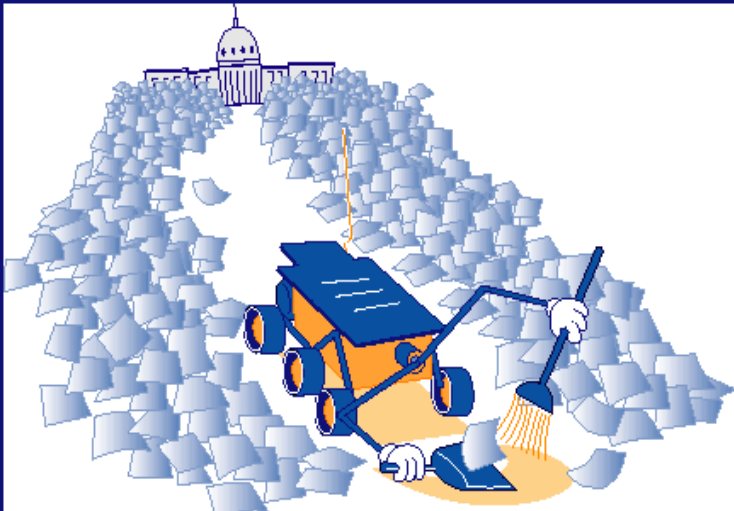
- [1. What are PLs and EHBs?](#)
- [2. Some Quick Summaries](#)
- [3. Some Applications](#)
- [4. In The Press](#)
- [5. Experiences](#)
- [6. Some Papers](#)
- [7. Some Demonstration Tools](#)
- [8. Some Subprocesses and Their Documentations](#)
- [9. Assembly Line Processes](#)
- [10. Benefits](#)

[White Paper Book](#)

[How Can I Apply These To My Organization's Processes?](#)

Complex Process Management Using PLs and EHBs [Where Shakespeare Meets Freud]

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BY D'ANGELO FOR THE WASHINGTON POST

Dr. Barry E. Jacobs
barry.e.jacobs@comcast.net
(301) 681-7816
[\[Mini-Bio\]](#)

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