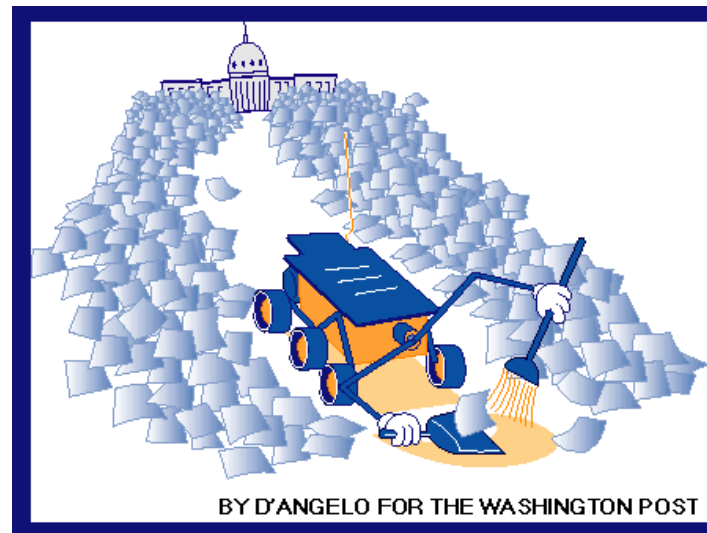


Improvement Subprocesses Management Using Process Libraries and Electronic Handbooks

(Where Shakespeare Meets Freud)



Demonstration



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

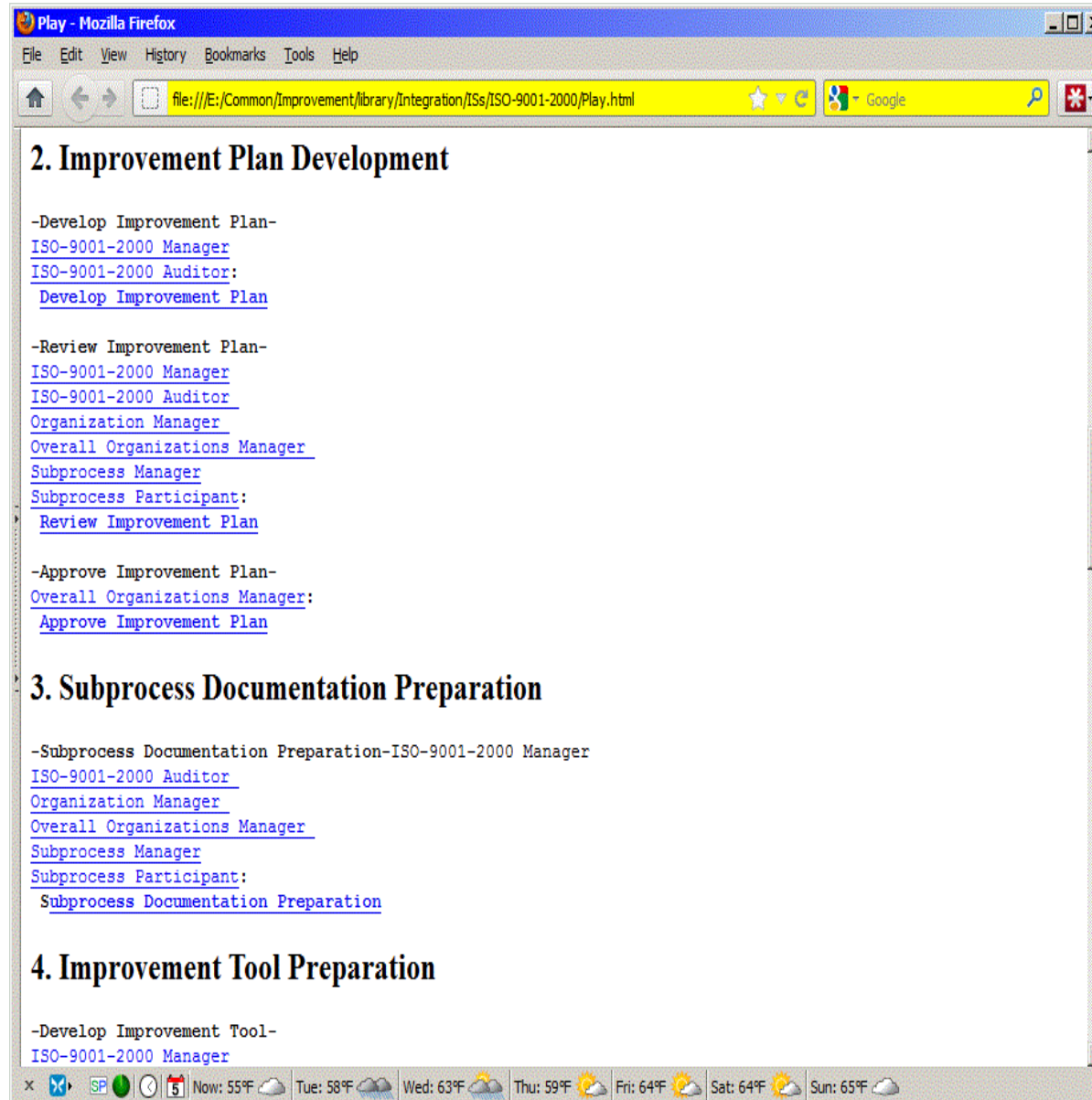
The Bottom Line:

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.

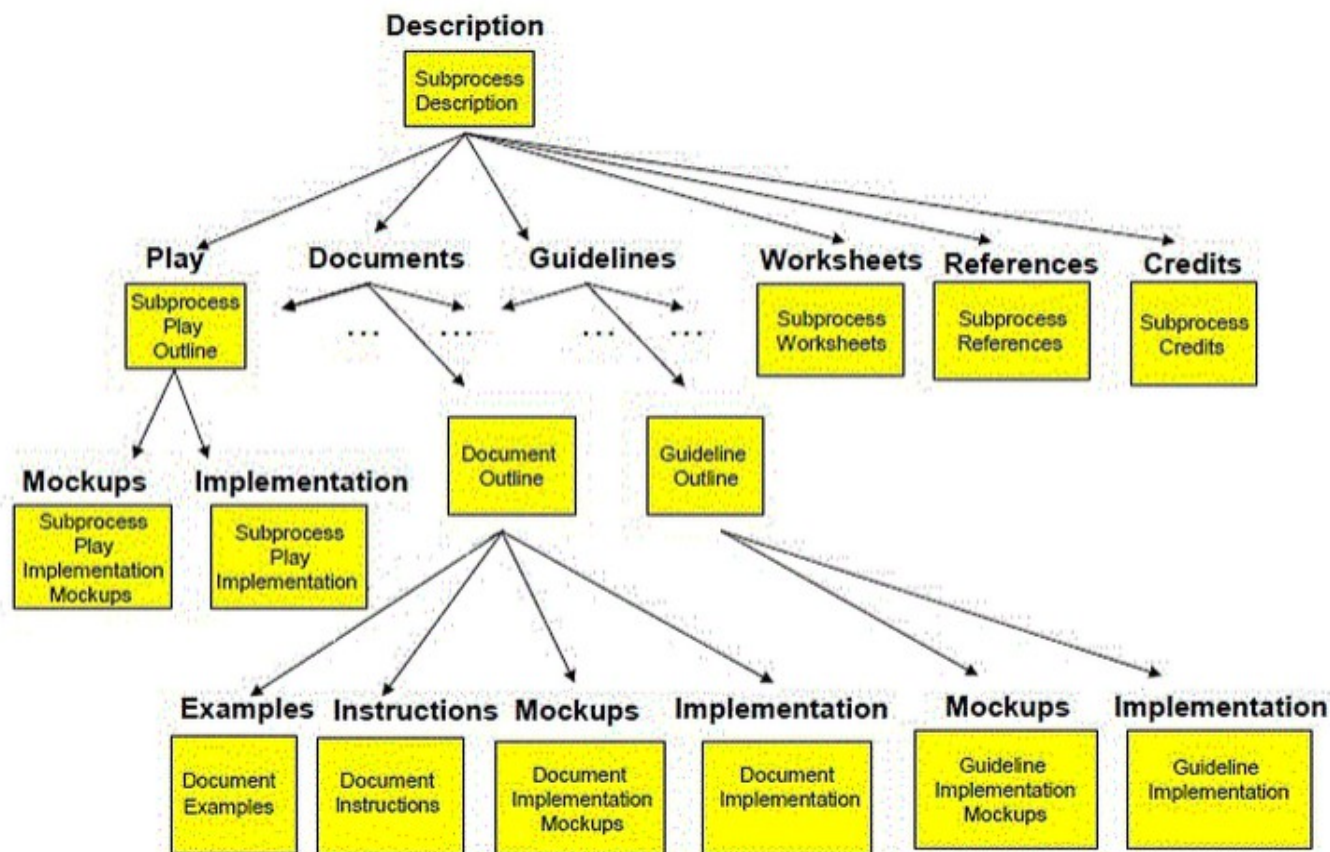
Plays describe subprocess execution.



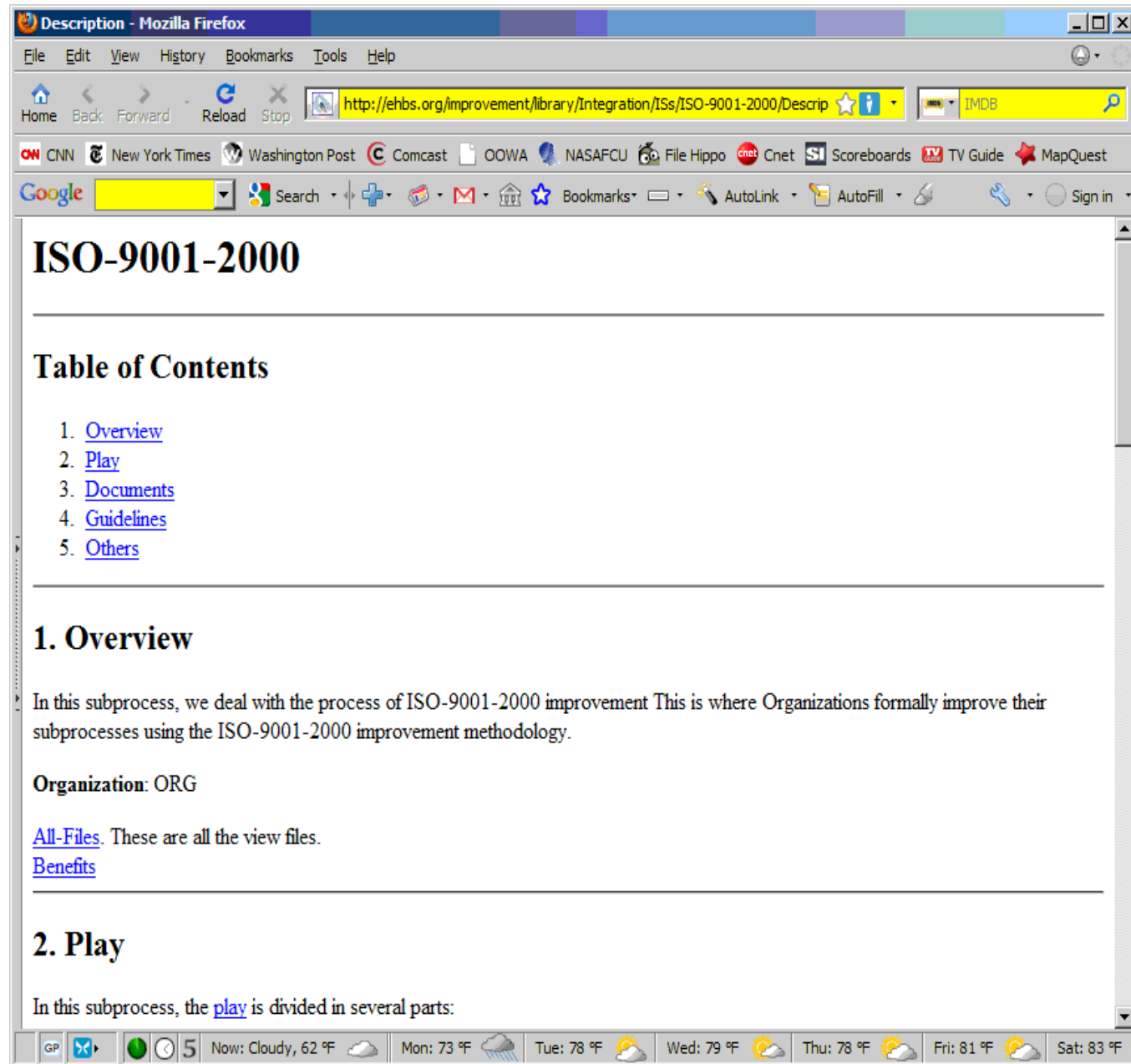
Benefits:

- 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.



Description - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Home Back Forward Reload Stop <http://ehbs.org/improvement/library/Integration/ISs/ISO-9001-2000/Descrip> ★ ⓘ IMDB

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

Google Search + - [Icons] Bookmarks* AutoLink AutoFill Sign in

ISO-9001-2000

Table of Contents

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

1. Overview

In this subprocess, we deal with the process of ISO-9001-2000 improvement This is where Organizations formally improve their subprocesses using the ISO-9001-2000 improvement methodology.

Organization: ORG

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

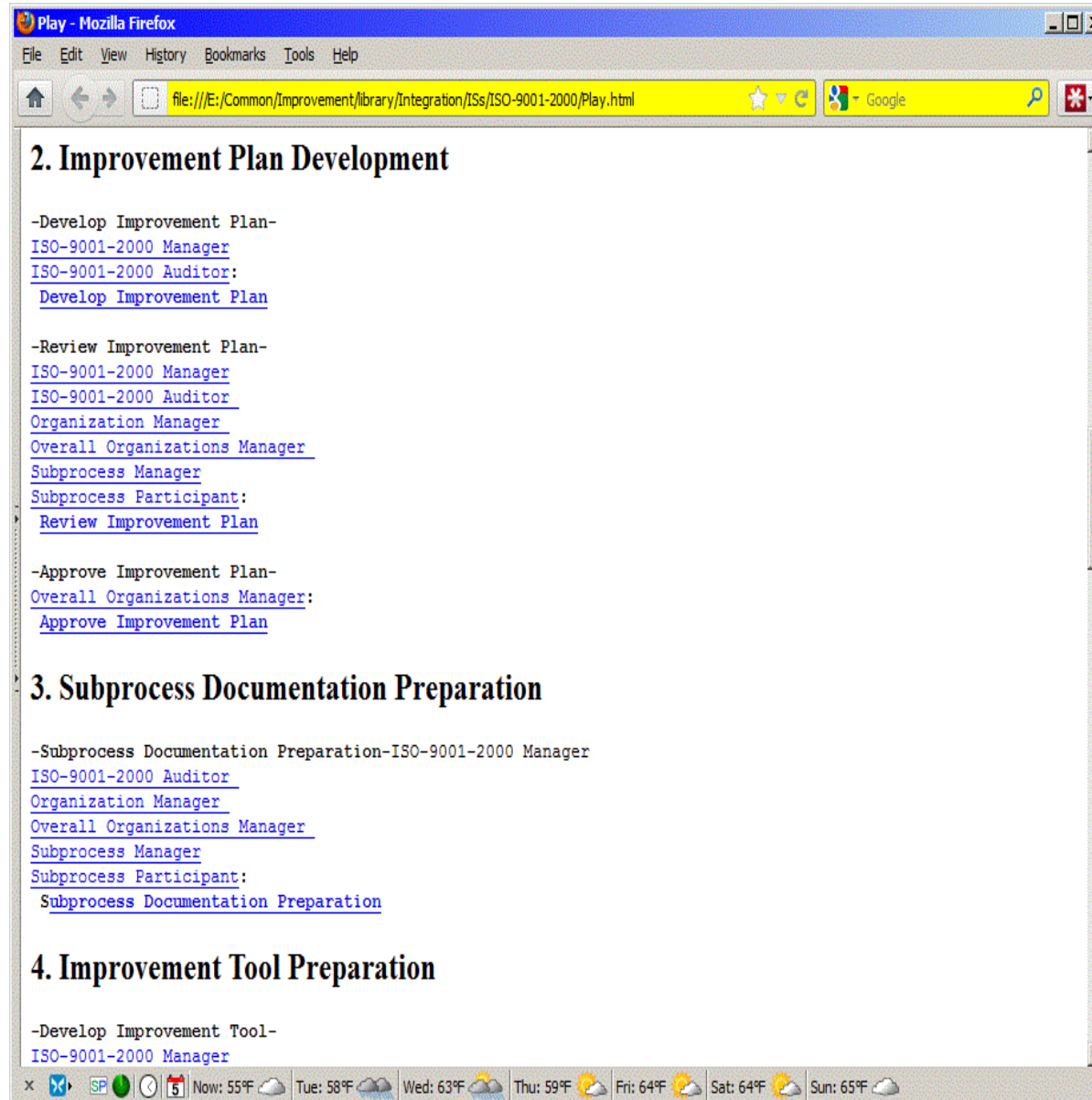
[Benefits](#)

2. Play

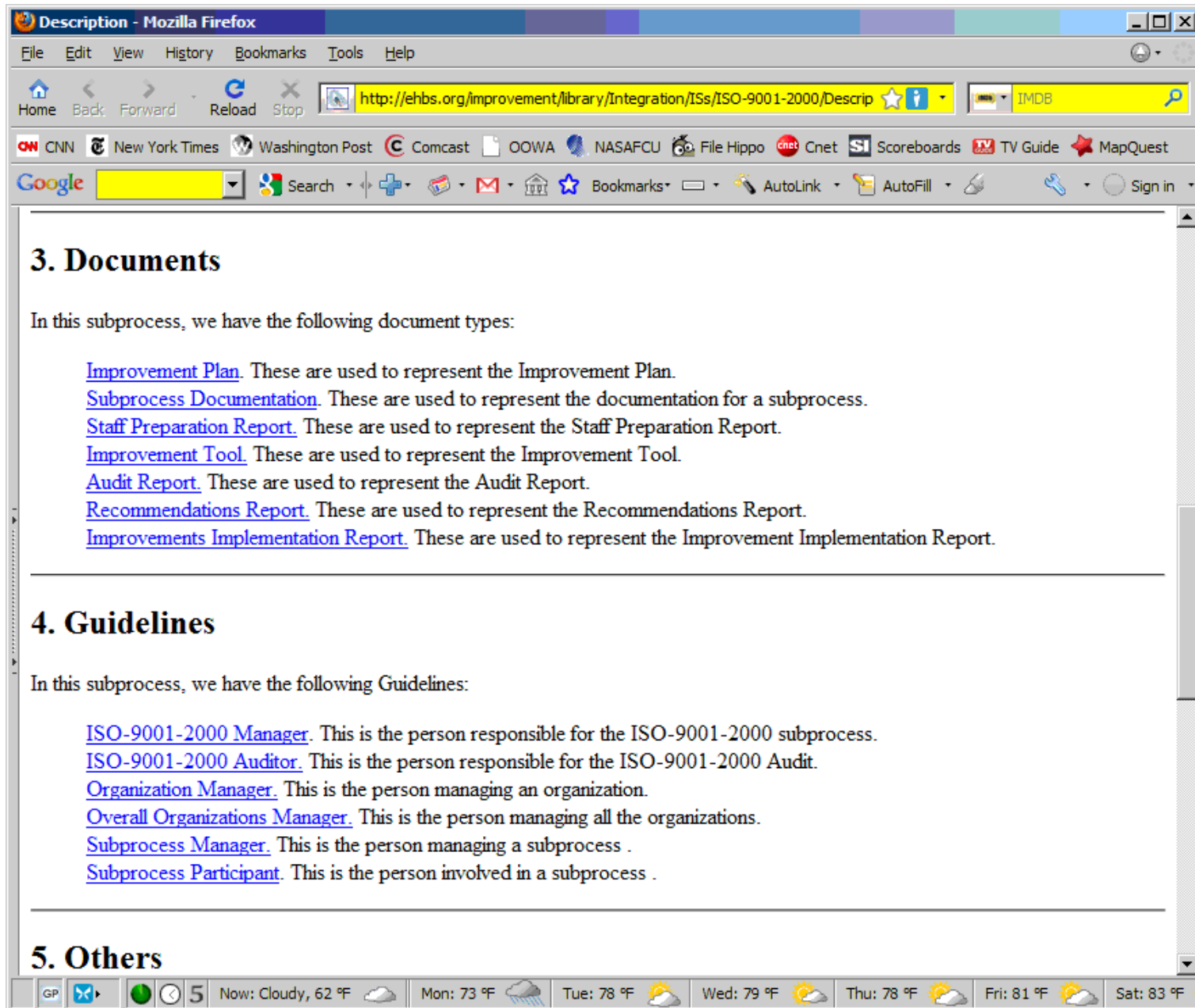
In this subprocess, the [play](#) is divided in several parts:

GP [Icons] 5 Now: Cloudy, 62 °F Mon: 73 °F Tue: 78 °F Wed: 79 °F Thu: 78 °F Fri: 81 °F Sat: 83 °F

Plays describe subprocess execution.



Documents describe subprocess data.



3. Documents

In this subprocess, we have the following document types:

- [Improvement Plan](#). These are used to represent the Improvement Plan.
- [Subprocess Documentation](#). These are used to represent the documentation for a subprocess.
- [Staff Preparation Report](#). These are used to represent the Staff Preparation Report.
- [Improvement Tool](#). These are used to represent the Improvement Tool.
- [Audit Report](#). These are used to represent the Audit Report.
- [Recommendations Report](#). These are used to represent the Recommendations Report.
- [Improvements Implementation Report](#). These are used to represent the Improvement Implementation Report.

4. Guidelines

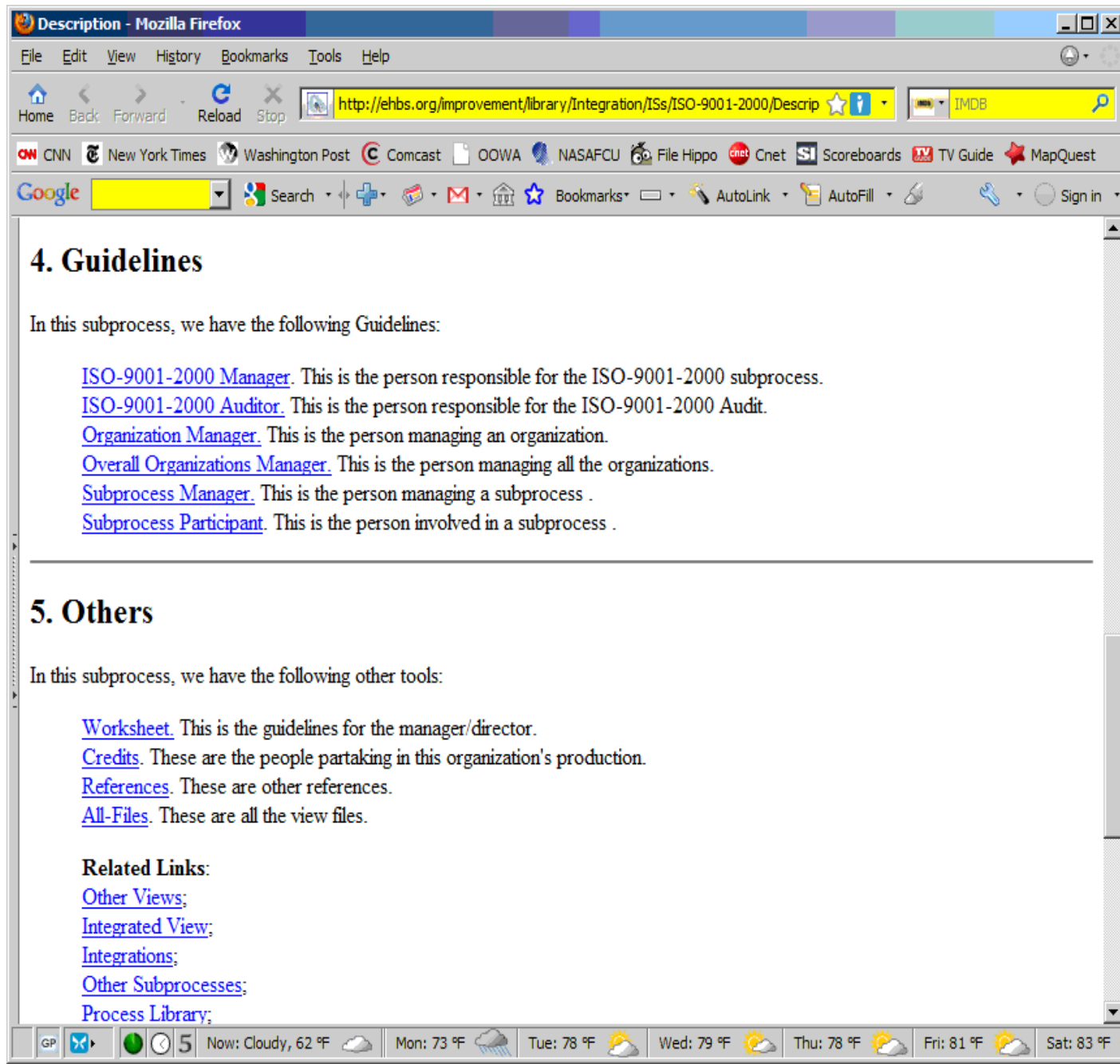
In this subprocess, we have the following Guidelines:

- [ISO-9001-2000 Manager](#). This is the person responsible for the ISO-9001-2000 subprocess.
- [ISO-9001-2000 Auditor](#). This is the person responsible for the ISO-9001-2000 Audit.
- [Organization Manager](#). This is the person managing an organization.
- [Overall Organizations Manager](#). This is the person managing all the organizations.
- [Subprocess Manager](#). This is the person managing a subprocess .
- [Subprocess Participant](#). This is the person involved in a subprocess .

5. Others

The browser window includes a menu bar (File, Edit, View, History, Bookmarks, Tools, Help), a toolbar with navigation buttons (Home, Back, Forward, Reload, Stop), a search bar, and a status bar at the bottom showing the current time and weather forecast for the week.

Guidelines describe user subprocesses.



The screenshot shows a Mozilla Firefox browser window with the address bar displaying <http://ehbs.org/improvement/library/Integration/ISs/ISO-9001-2000/Descrip>. The page content is as follows:

4. Guidelines

In this subprocess, we have the following Guidelines:

- [ISO-9001-2000 Manager](#). This is the person responsible for the ISO-9001-2000 subprocess.
- [ISO-9001-2000 Auditor](#). This is the person responsible for the ISO-9001-2000 Audit.
- [Organization Manager](#). This is the person managing an organization.
- [Overall Organizations Manager](#). This is the person managing all the organizations.
- [Subprocess Manager](#). This is the person managing a subprocess .
- [Subprocess Participant](#). This is the person involved in a subprocess .

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

Related Links:

- [Other Views;](#)
- [Integrated View;](#)
- [Integrations;](#)
- [Other Subprocesses;](#)
- [Process Library;](#)

The browser's status bar at the bottom shows the current time as 5:00 and the weather as "Now: Cloudy, 62 °F". The system tray includes icons for GP, network, and a clock.

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/flightprojects/summary/mock-ups/Worksheet.htm

IMC6

Subprocess Worksheet

Classification: Improvement Subprocesses (T6-00-00-00)

Subprocess Type:ISO-9001-2000 (T6-1-00-00)

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 Phase D: Project Development . | 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 |
| Project Technical Products | The purpose of this task is to provide Technical products for the Flight Project. | Phase D Manager, Project Manager, Program Manager, Organization Manager, Overall Projects Manager, Task Lead, Subtask Lead, Reviewer, Approval Official, Documents Manager | James Green | 06/23/07 | 06/23/07 | Missile System Pre-Launch Safety Package (Update) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | As-built Hardware and Software Documentation (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Verification and Validation Report (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Operations Handbook (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Reviews | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Approvals | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| Project Planning, Cost, and Schedule Products | The purpose of this task is to provide Planning, Cost, and Schedule products for the Flight Project. | Phase D Manager, Project Manager, Program Manager, Organization Manager, Overall Projects Manager, Task Lead, Subtask Lead, Reviewer, | James Green | 07/23/07 | 07/23/07 | Work Agreement for Next Phase (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Reviews | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | | | | | | |

D... Now: Sunny, 68° F Tue: 86° F Wed: 88° F Thu: 87° F Fri: 85° F Sat: 81° F Sun: 82° 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 Improvement Subprocesses Process Library

The objective of this tool is to help Improvement Subprocesses Managers (and Staff) to *quickly learn* to build and manage improvement subprocesses. We present our approach in five bullets.

- We focus on the documents that Improvement Subprocesses 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 Common Process Library see: [paper](#), [summary](#), and [other process libraries](#).

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

Subprocesses - Mozilla Firefox

FileEditViewHistoryBookmarksToolsHelp

HomeBackForwardReloadPrintStop

file:///E:/Common/Improvement/whatare/process.htm

IMDB

Improvement Subprocesses

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

GP

Now: Sunny, 64° F

Tue: 64° F

Wed: 56° F

Thu: 59° F

Fri: 63° F

Sat: 61° F

Sun: 63°

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

NASA Flight Programs/Missions Organizations - Mozilla Firefox

File Edit View History Bookmarks Tools Help

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

Amazon.com

NASA Flight Projects/Missions Organizations

| Product Realization Subprocesses Organizations |
|--|
| 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 |
| Geostationary Operational Environmental Satellite Program (GOES) - Organization Subprocess Formulation |
| 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) |
| James Webb Space Telescope (JWST) |
| INTERNATIONAL Gamma-Ray Astrophysics Laboratory (INTEGRAL) |
| Lunar Reconnaissance Orbiter (LRO) |
| Mars Exploration Rover - Opportunity |
| Mars Exploration Rover - Spirit |
| Mars Global Surveyor |
| Mars Reconnaissance Orbiter (MRO) |
| 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 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 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Organizations Execute The Eight "Pl... X +

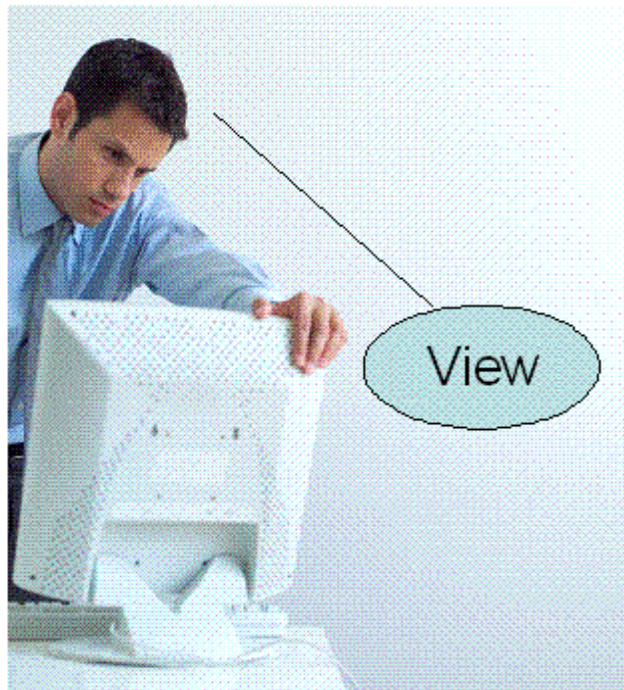
ehbs.org/intro/summary/Eight-Stages.html Wikipedia (en)

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"



View View View View View View View View View View View View

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.

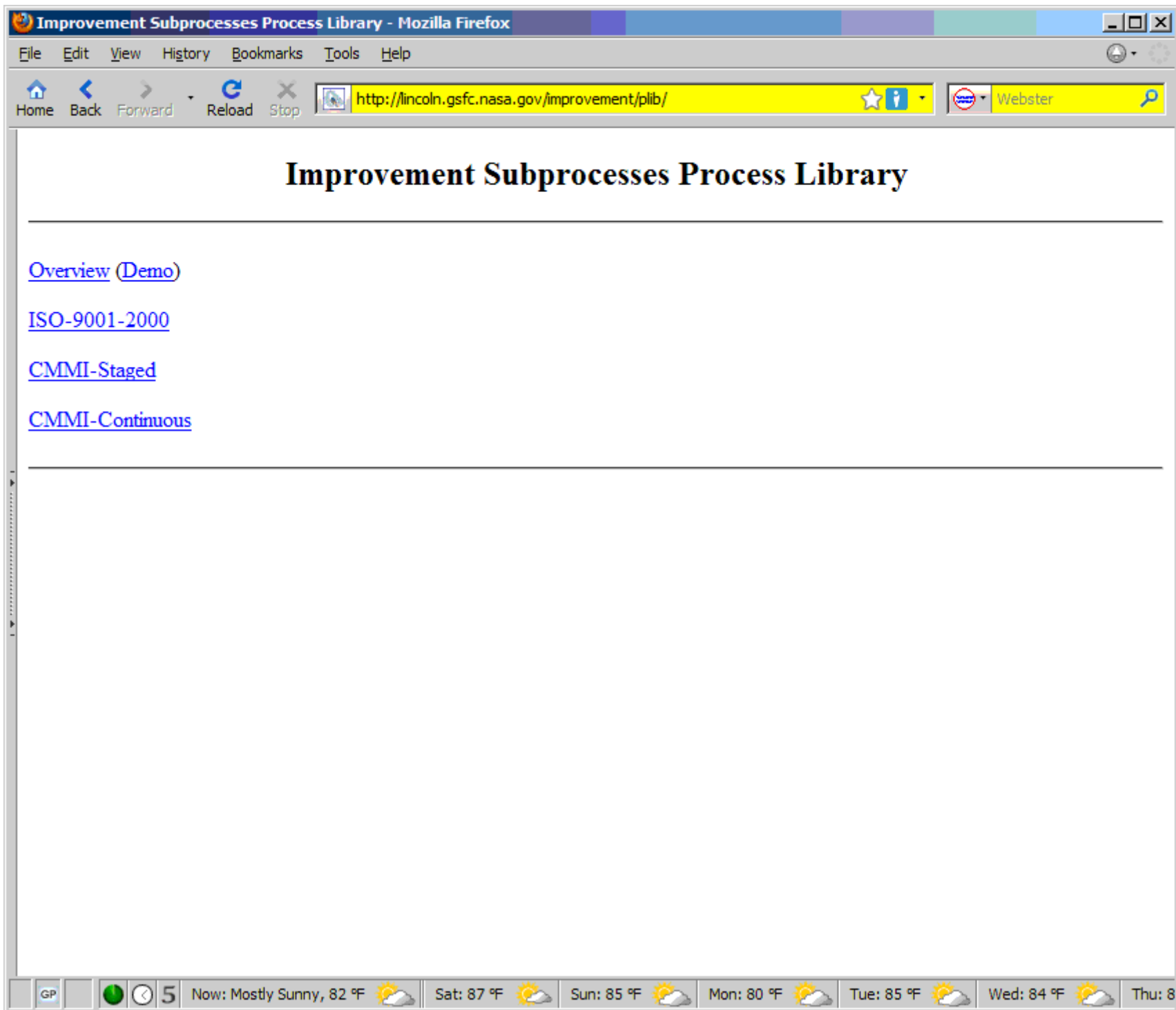
| Problem | Solution |
|--|---|
| Develop Internet-based tools to support the paperless documentation and management of complex distributed processes. | Editable process documentation tools can be tailored to each subprocess. |
| Organizations provide different views of the subprocesses. | Editable process 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. |

Overview of Improvement Subprocesses Process Library

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



Views

Total 30 Entries

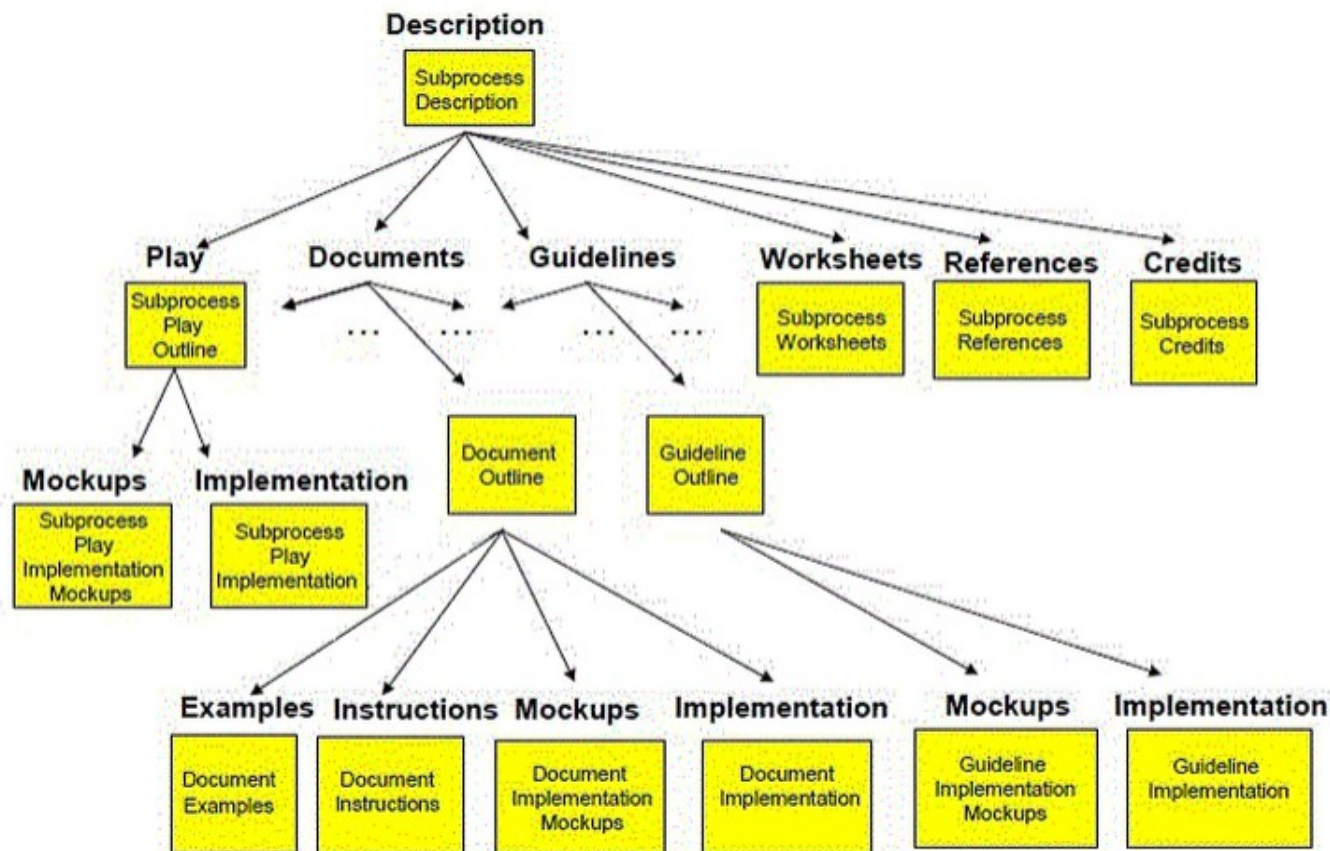
Classification: Improvement Subprocesses (T6-00-00-00)

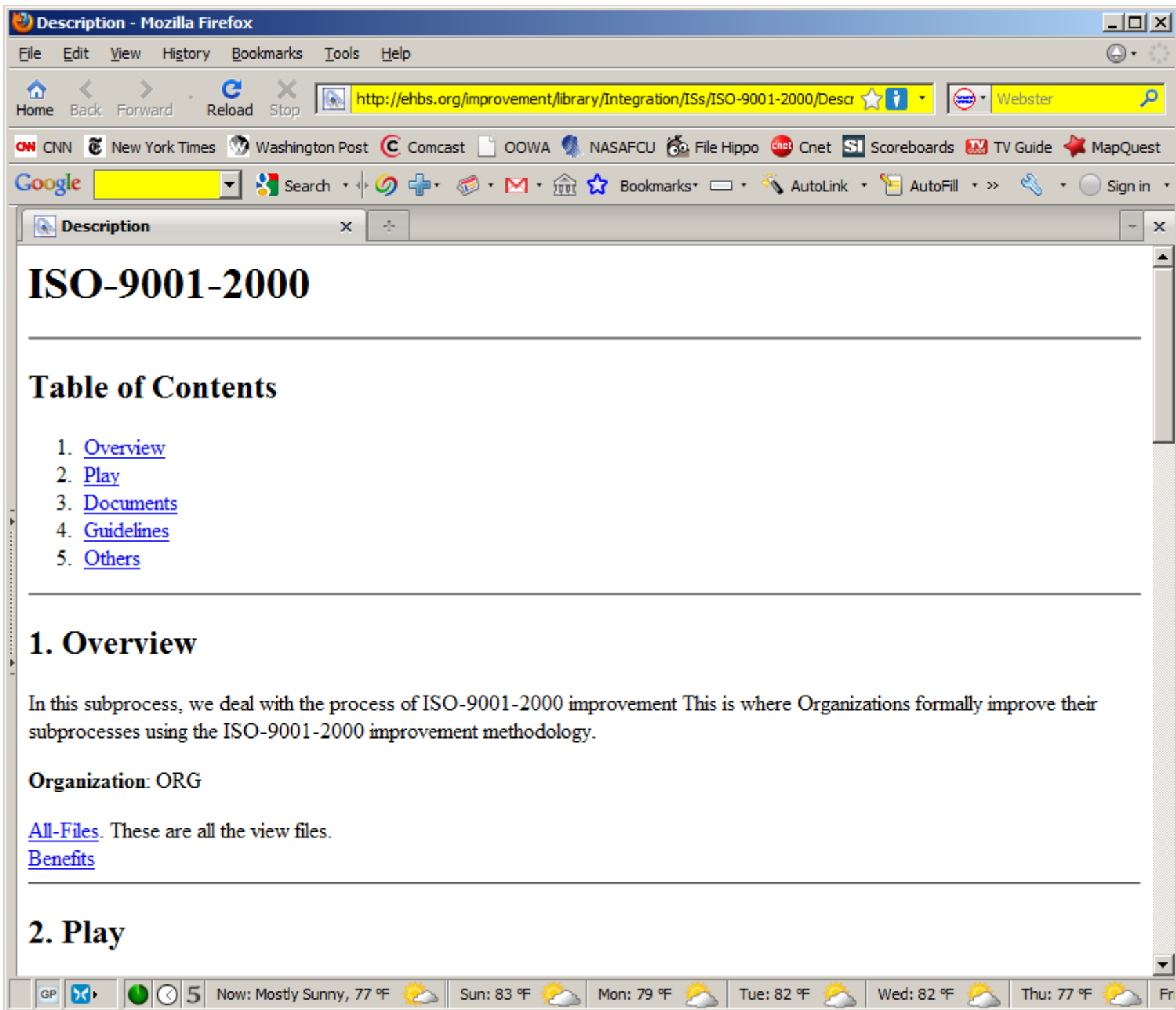
Subprocess Type:ISO-9001-2000 (T6-1-00-00)

[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 Richard A. Pickering (Richard.A.Pickering@nasa.gov) | Update Copy Delete |
| ESMO Paul Ondrus (Paul.Ondrus@nasa.gov) | Update Copy Delete |

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





Play - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///E:/Common/Improvement/library/Integration/ISs/ISO-9001-2000/Play.html

Google

2. Improvement Plan Development

-Develop Improvement Plan-

[ISO-9001-2000 Manager](#)
[ISO-9001-2000 Auditor:](#)
[Develop Improvement Plan](#)

-Review Improvement Plan-

[ISO-9001-2000 Manager](#)
[ISO-9001-2000 Auditor](#)
[Organization Manager](#)
[Overall Organizations Manager](#)
[Subprocess Manager](#)
[Subprocess Participant:](#)
[Review Improvement Plan](#)

-Approve Improvement Plan-

[Overall Organizations Manager:](#)
[Approve Improvement Plan](#)

3. Subprocess Documentation Preparation

-Subprocess Documentation Preparation-ISO-9001-2000 Manager

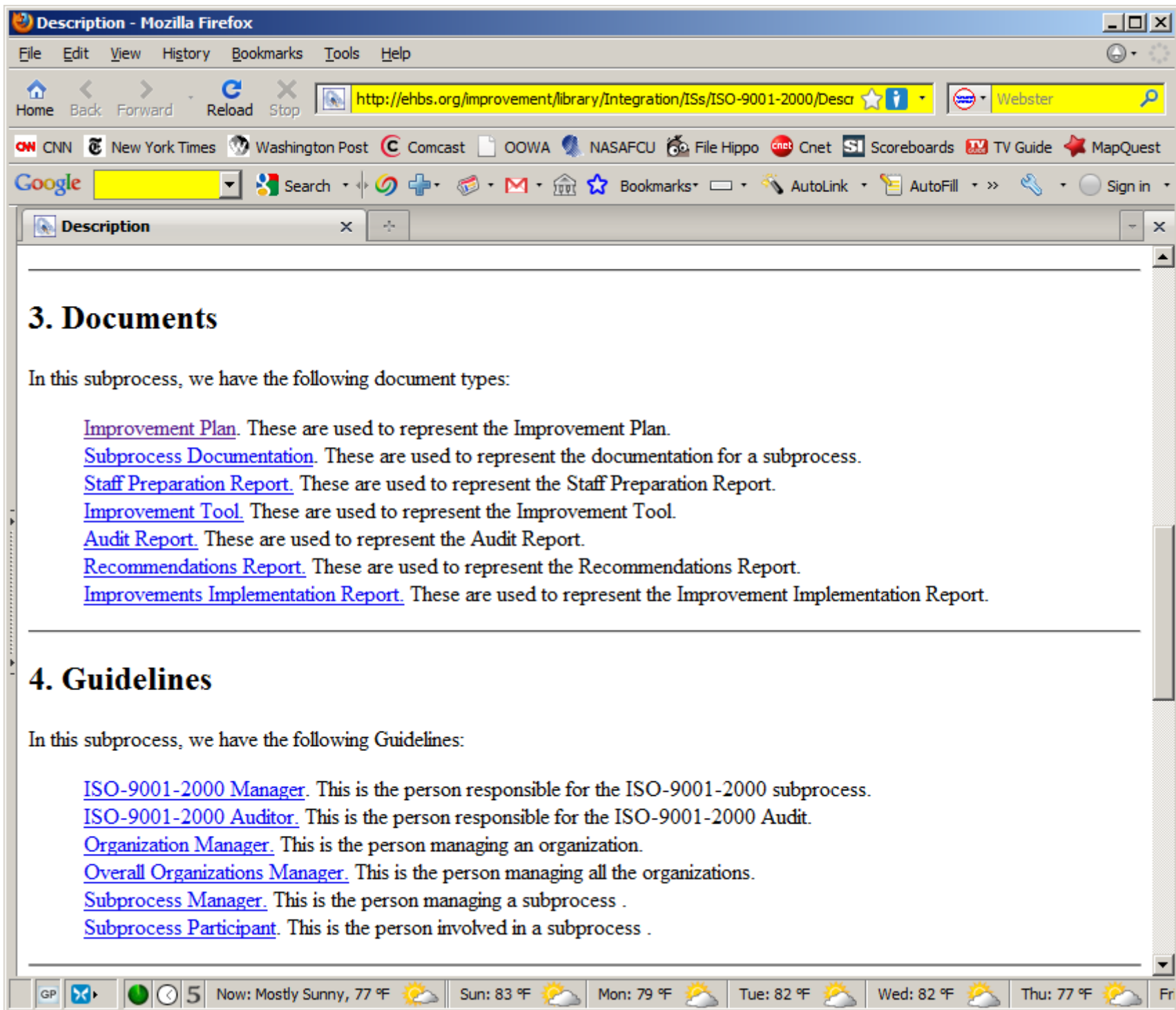
[ISO-9001-2000 Auditor](#)
[Organization Manager](#)
[Overall Organizations Manager](#)
[Subprocess Manager](#)
[Subprocess Participant:](#)
[Subprocess Documentation Preparation](#)

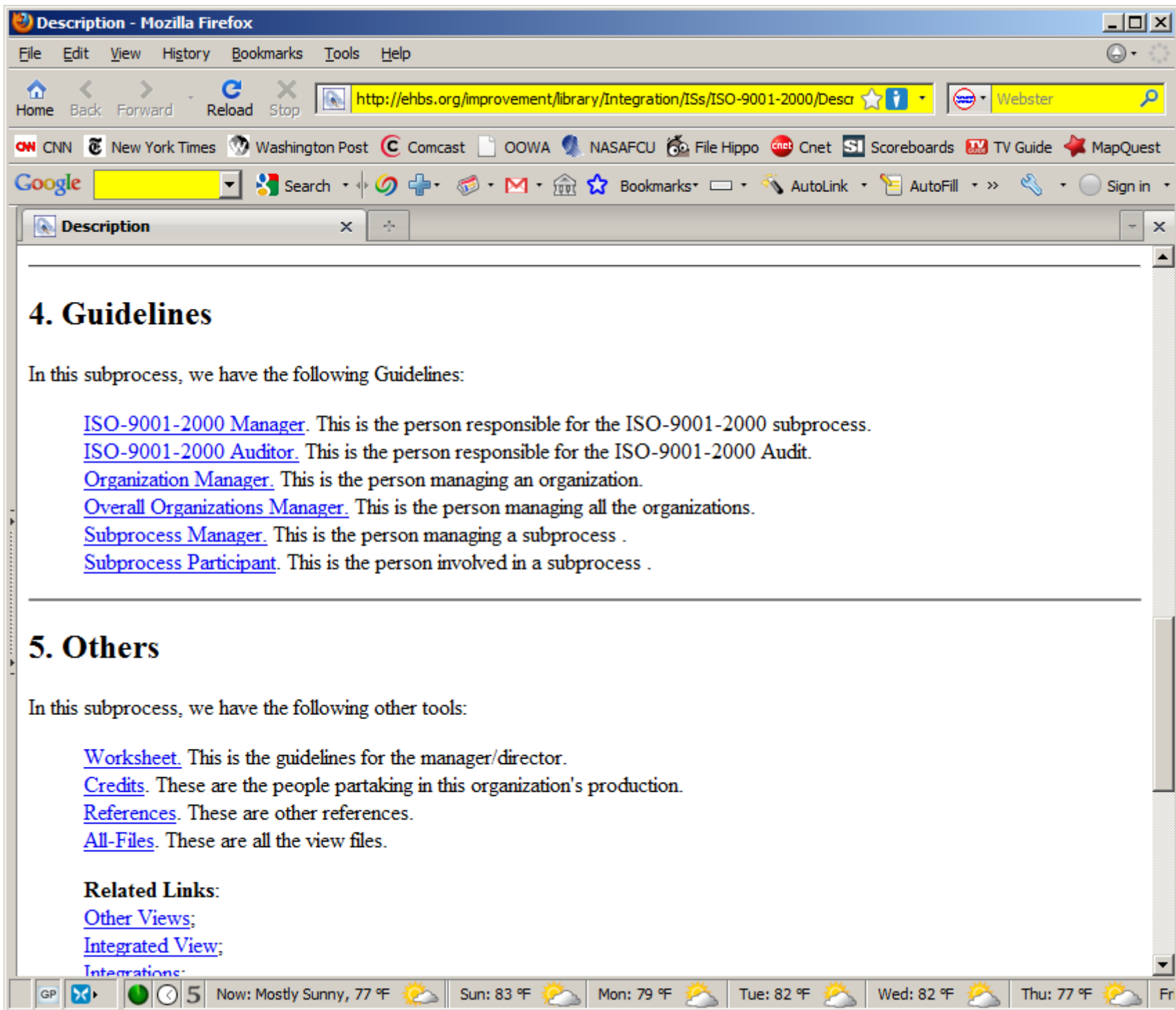
4. Improvement Tool Preparation

-Develop Improvement Tool-

[ISO-9001-2000 Manager](#)

Now: 55°F Tue: 58°F Wed: 63°F Thu: 59°F Fri: 64°F Sat: 64°F Sun: 65°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/flightprojects/summary/mock-ups/Worksheet.htm

IMDB

Subprocess Worksheet

Classification: Improvement Subprocesses (T6-00-00-00)

Subprocess Type:ISO-9001-2000 (T6-1-00-00)

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 Phase D: Project Development . | 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 |
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| | | | | | | As-built Hardware and Software Documentation (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Verification and Validation Report (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Operations Handbook (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Reviews | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Approvals | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| Project Planning, Cost, and Schedule Products | The purpose of this task is to provide Planning, Cost, and Schedule products for the Flight Project. | Phase D Manager, Project Manager, Program Manager, Organization Manager, Overall Projects Manager, Task Lead, Subtask Lead, Reviewer, | James Green | 07/23/07 | 07/23/07 | Work Agreement for Next Phase (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Reviews | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | | | | | | |

D... Now: Sunny, 68° F Tue: 86° F Wed: 88° F Thu: 87° F Fri: 85° F Sat: 81° F Sun: 82° F

References

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

[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](#)

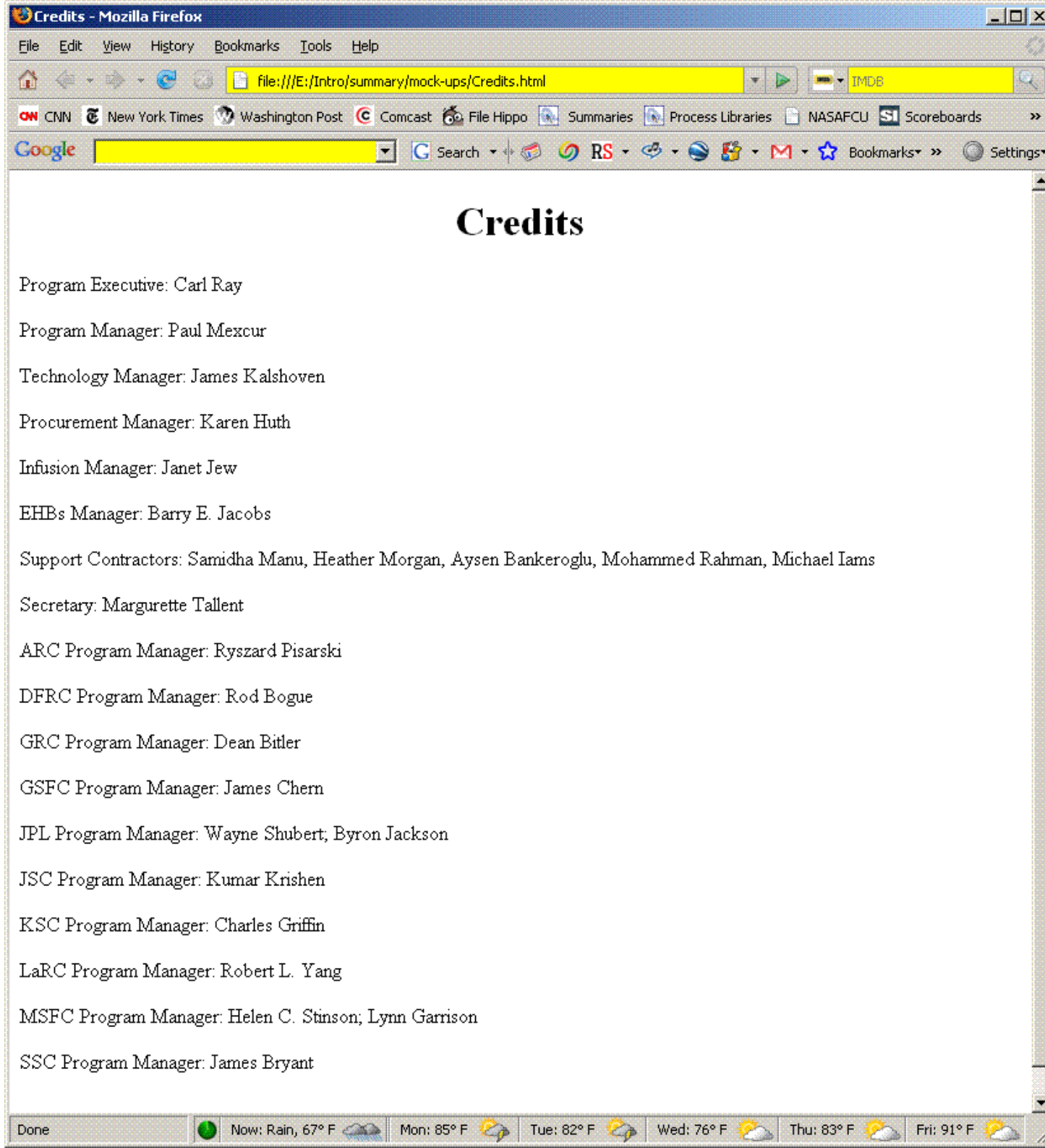
[General Waivers](#)

[Key Decision Points](#)

[Waivers to NPR 7120.5D](#)

[Technical Authority](#)

[Waiver Form](#)



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

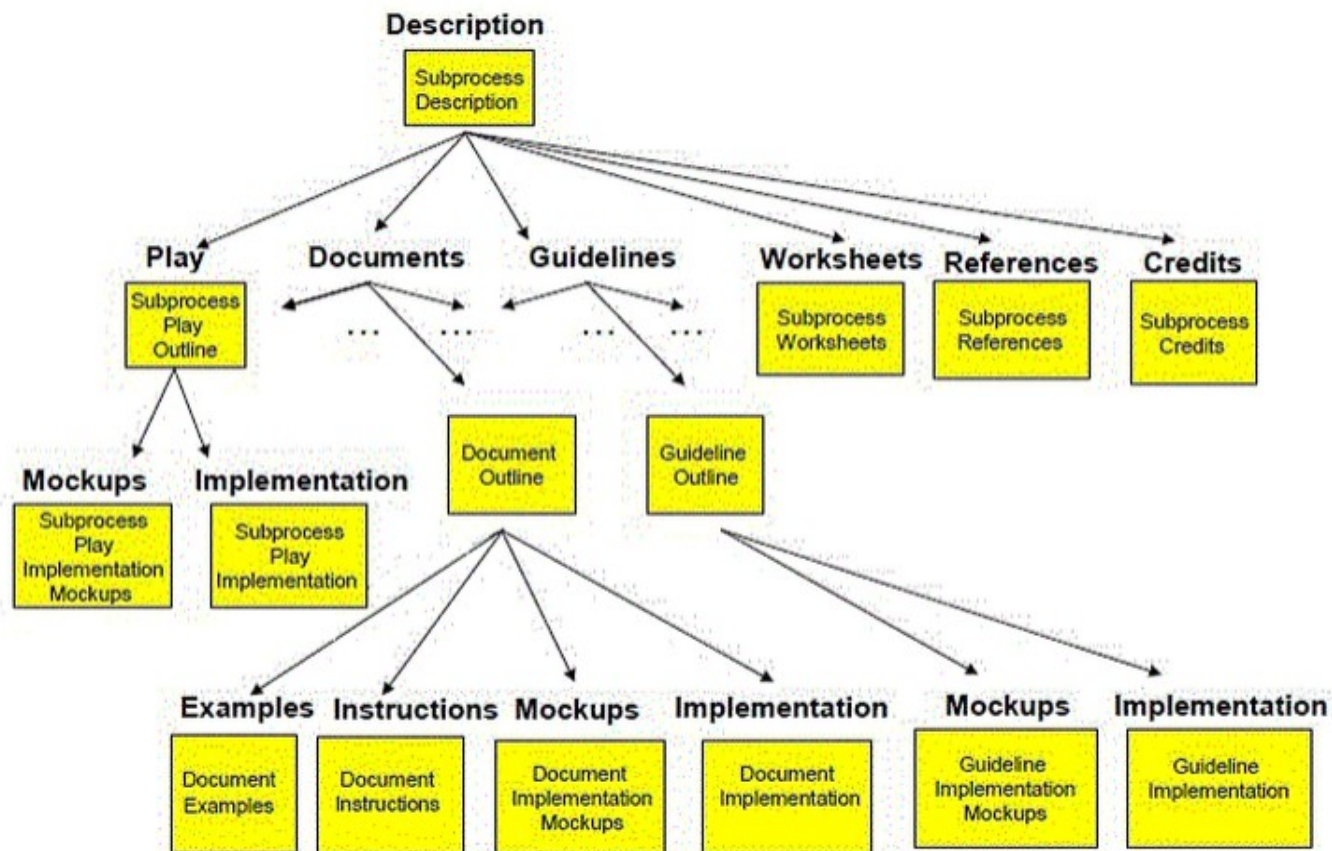
ehbs.org/intro/summary/stages2.html

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. |


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

File Edit View History Bookmarks Tools Help

Shakespeare Meets Freud



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

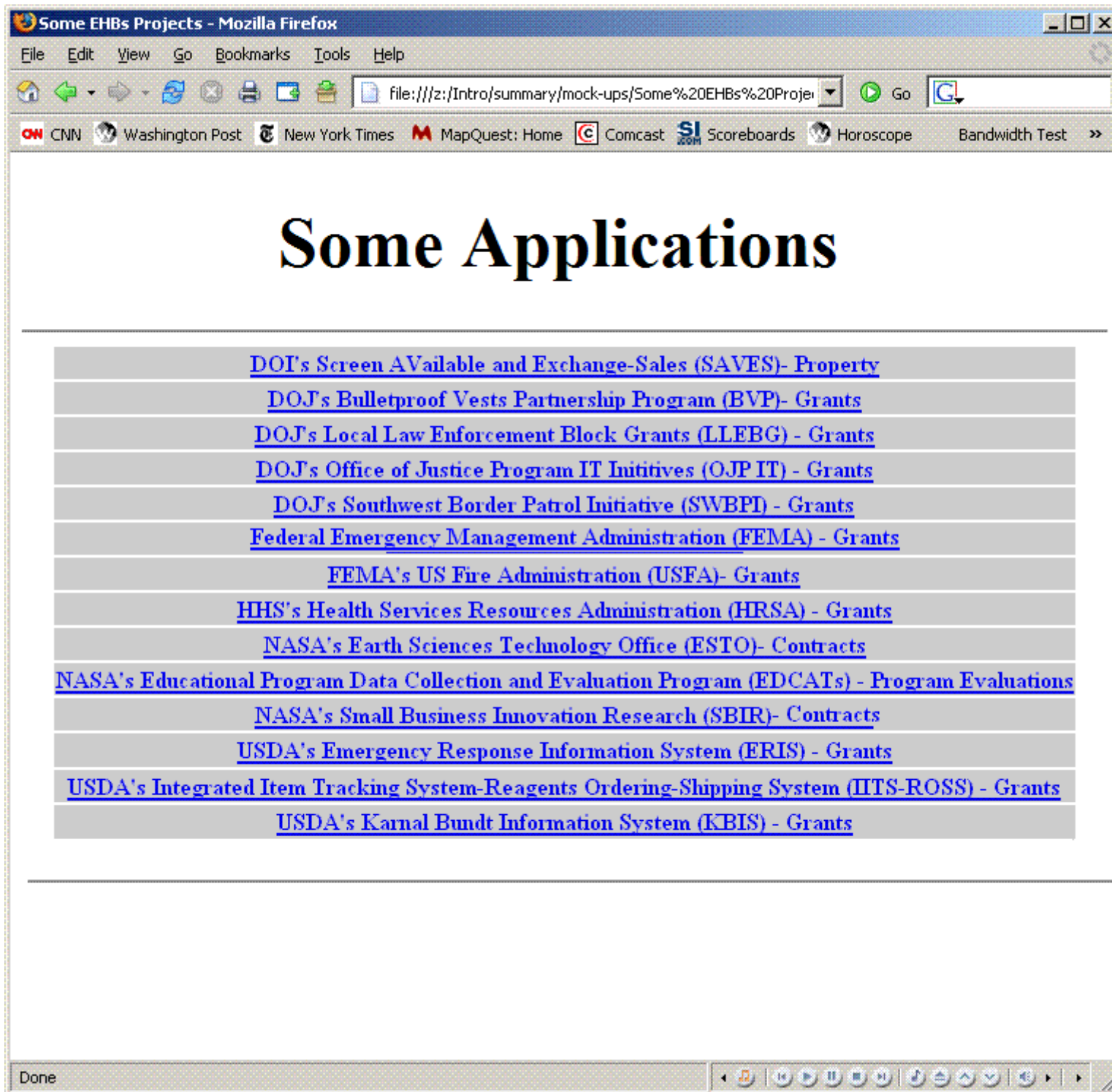


- **In Process Libraries (PLs), subprocesses are represented as "plays" where "actors" communicate thru the Internet. Each organization puts on its own "productions". For each role, Electronic Handbooks (EHBs) (also called Guidelines) guide "actors" thru their parts. Managers are "directors" using Worksheets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





Some Applications

[DOI's Screen Available and Exchange-Sales \(SAVES\)- Property](#)

[DOJ's Bulletproof Vests Partnership Program \(BVP\)- Grants](#)

[DOJ's Local Law Enforcement Block Grants \(LLEBG\) - Grants](#)

[DOJ's Office of Justice Program IT Initiatives \(OJP IT\) - Grants](#)

[DOJ's Southwest Border Patrol Initiative \(SWBPI\) - Grants](#)

[Federal Emergency Management Administration \(FEMA\) - Grants](#)

[FEMA's US Fire Administration \(USFA\)- Grants](#)

[HHS's Health Services Resources Administration \(HRSA\) - Grants](#)

[NASA's Earth Sciences Technology Office \(ESTO\)- Contracts](#)

[NASA's Educational Program Data Collection and Evaluation Program \(EDCATs\) - Program Evaluations](#)

[NASA's Small Business Innovation Research \(SBIR\)- Contracts](#)

[USDA's Emergency Response Information System \(ERIS\) - Grants](#)

[USDA's Integrated Item Tracking System-Reagents Ordering-Shipping System \(IITS-ROSS\) - Grants](#)

[USDA's Karnal Bundt Information System \(KBIS\) - Grants](#)

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

File Edit View History Bookmarks Tools Help

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

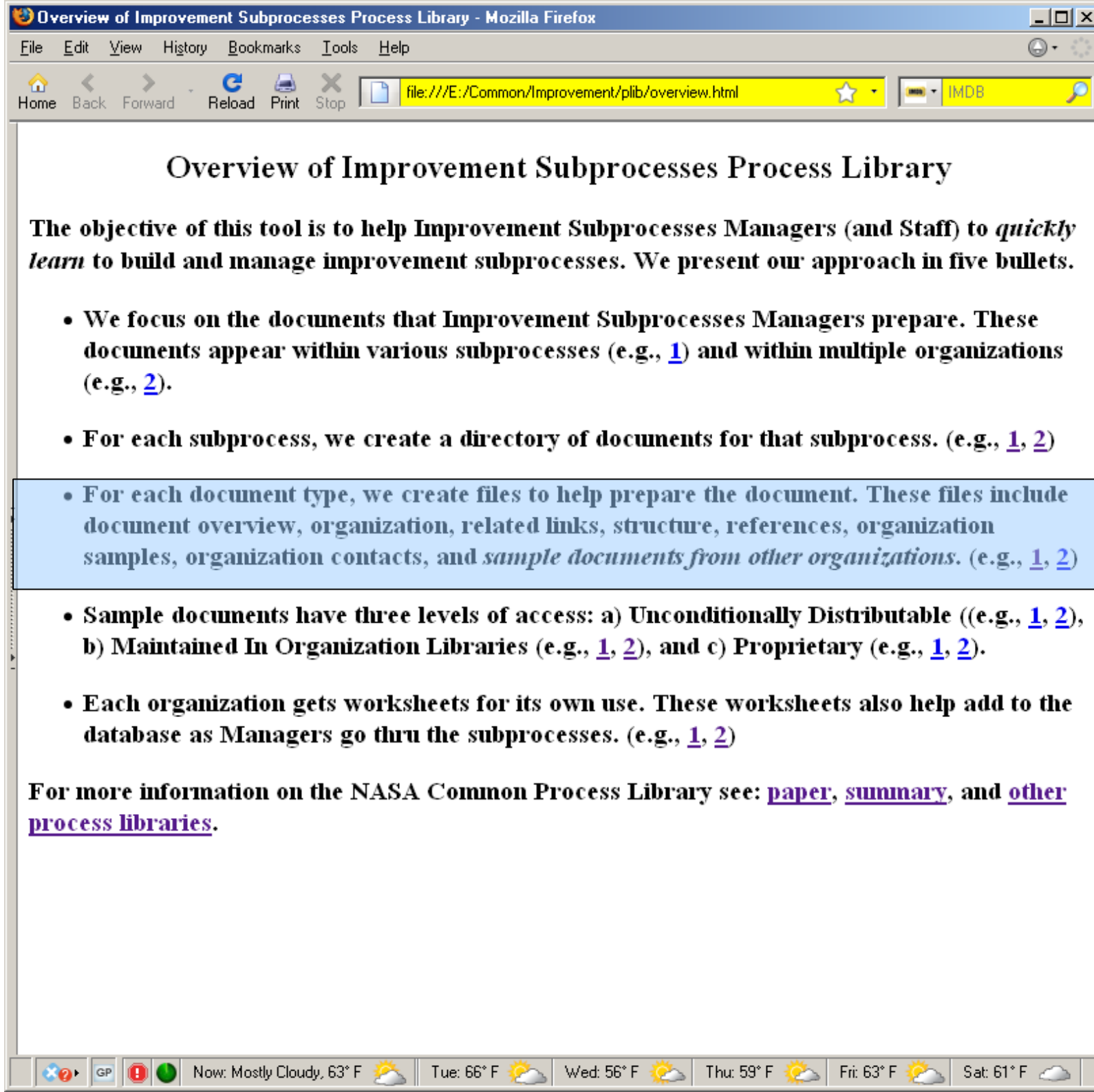
File Edit View History Bookmarks Tools Help

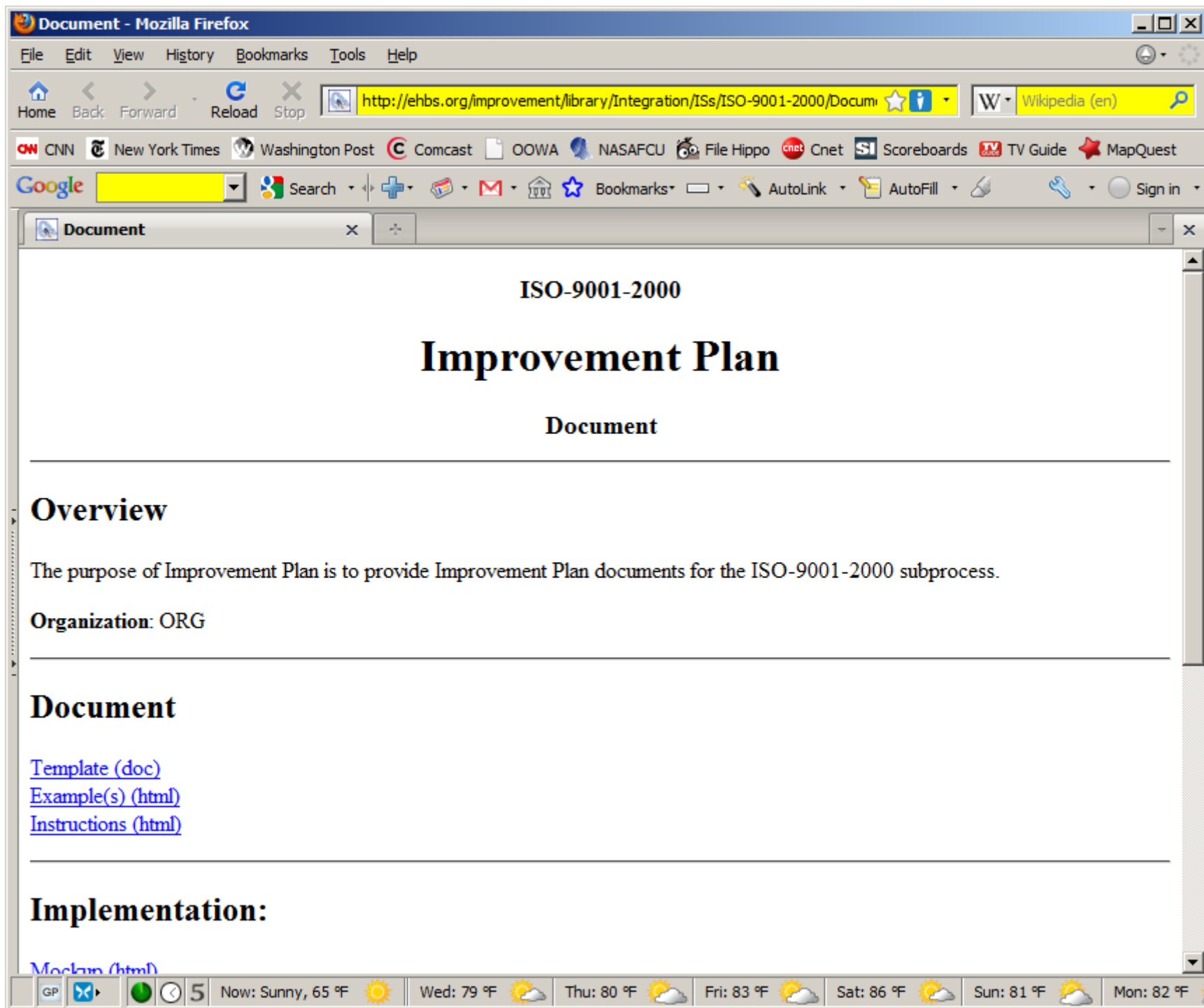
Home Back Forward Reload Stop <http://ehbs.org/intro/summary/operations.htm> IMDB

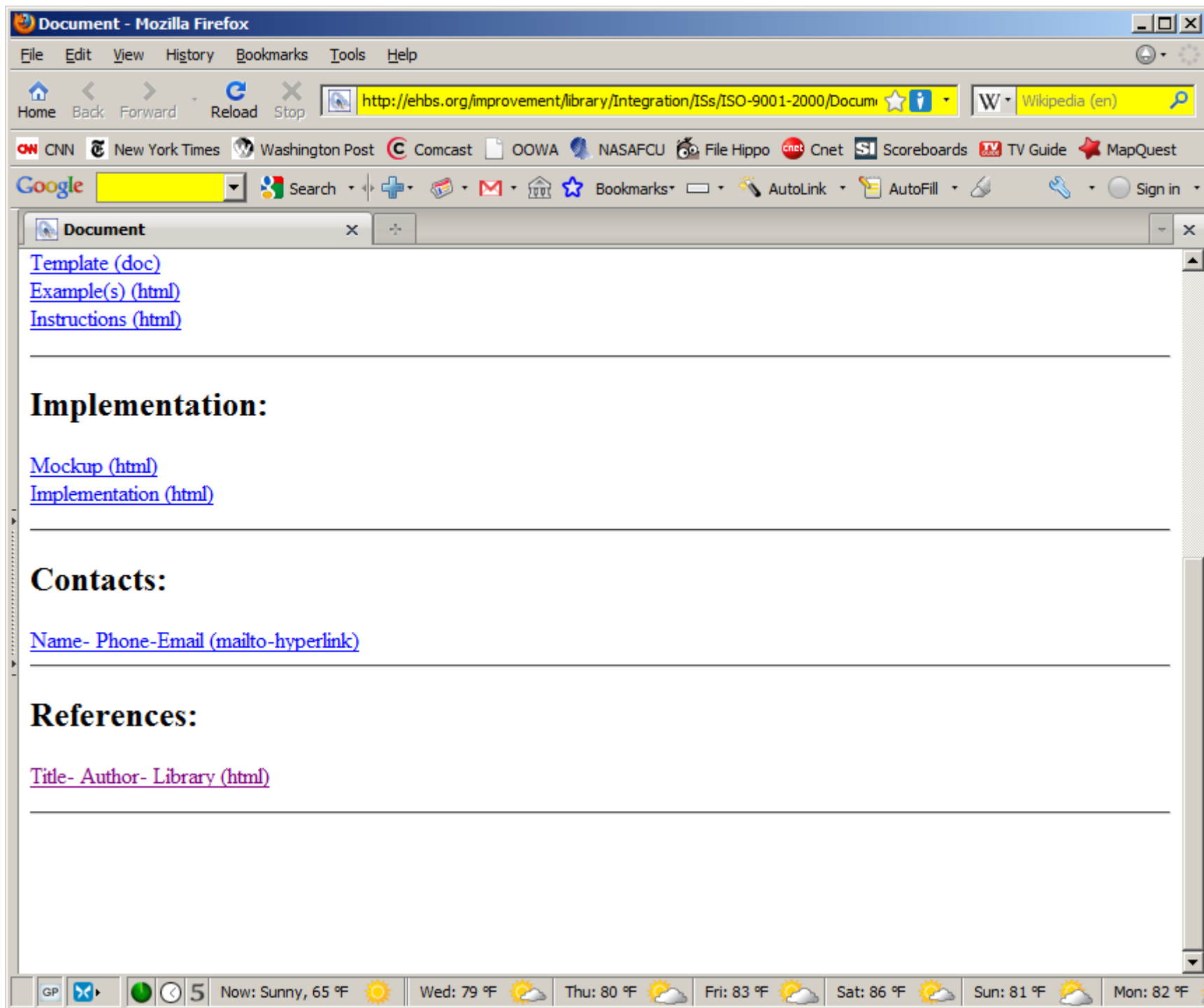
Process Library Operations that are supported.

- **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 5 Now: Cloudy, 34 °F Tue: 38 °F Wed: 43 °F Thu: 47 °F Fri: 52 °F Sat: 44 °F S







| Read Integration | |
|---------------------|--|
| Title | Improvement Plan |
| Type | Document |
| Id | T6-1-3-00 |
| Ordinal | |
| URL | http://ehbs.org/fps/RCTs/ISs/ISO-9001-2000/Type%201/View/ISO-9001-2000/Documents/Improvement Plan.htm Fetch |
| Date Created | 25-JUL-2005 |
| Date Updated | 08-AUG-2007 |

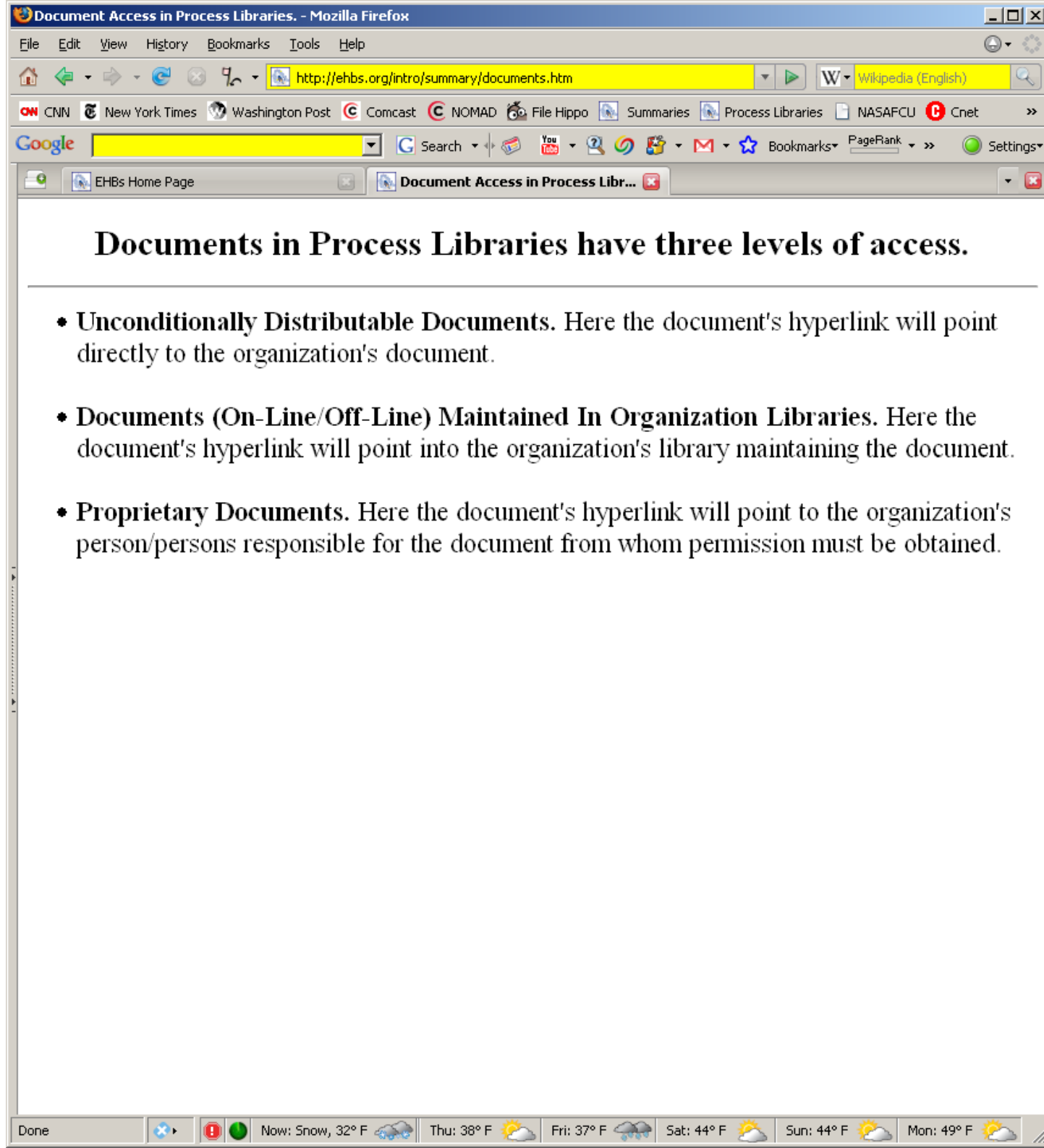
GP  Now: Partly Cloudy, 55° F  Wed: 56° F  Thu: 59° F  Fri: 63° F  Sat: 61° F  Sun: 63° F  Mon: 5

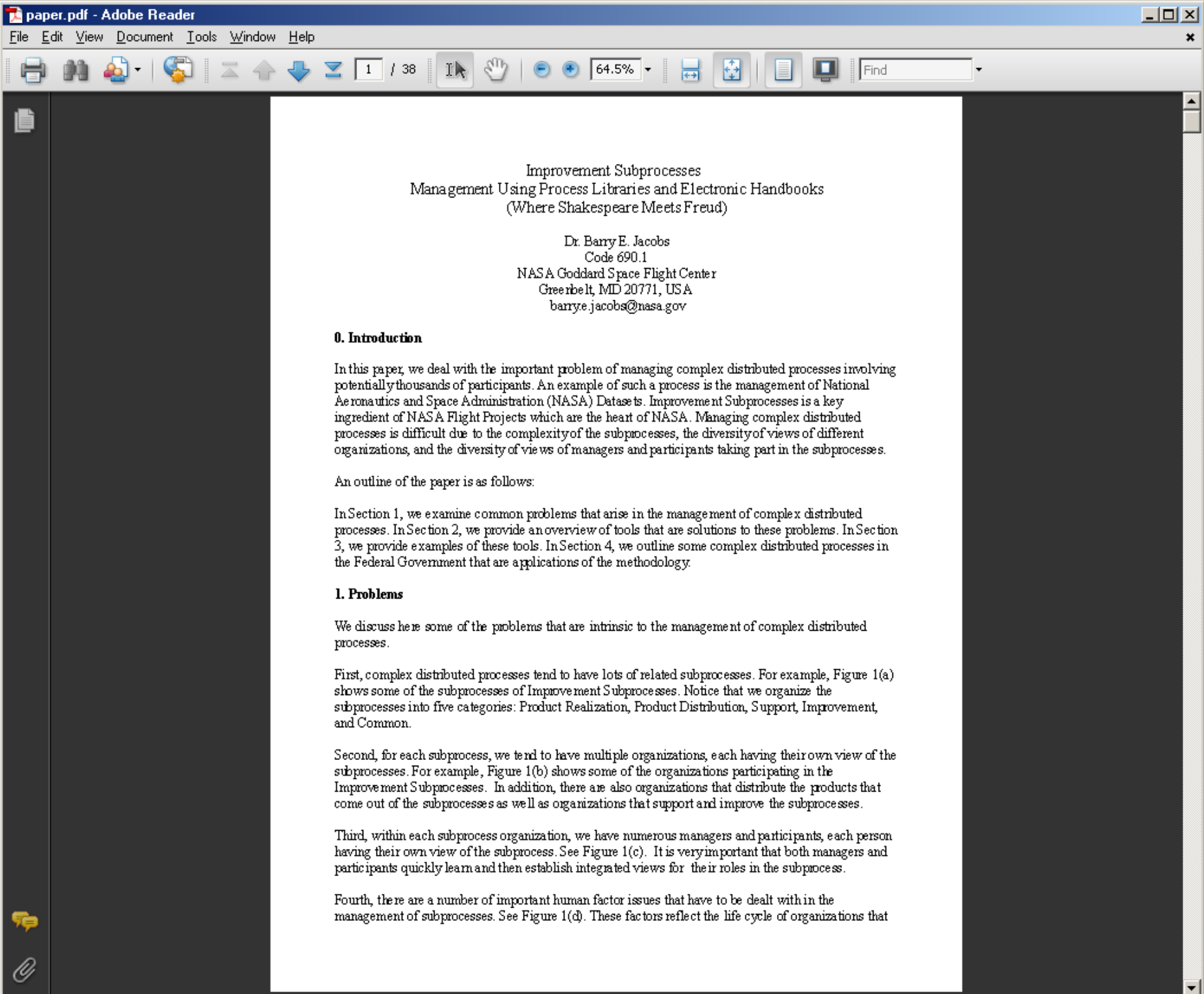
Overview of Improvement Subprocesses Process Library

The objective of this tool is to help Improvement Subprocesses Managers (and Staff) to *quickly learn* to build and manage improvement subprocesses. We present our approach in five bullets.

- **We focus on the documents that Improvement Subprocesses Managers prepare. These documents appear within various subprocesses (e.g., [1](#)) and within multiple organizations (e.g., [2](#)).**
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For more information on the NASA Common Process Library see: [paper](#), [summary](#), and [other process libraries](#).





Improvement Subprocesses
Management Using Process Libraries and Electronic Handbooks
(Where Shakespeare Meets Freud)

Dr. Barry E. Jacobs
Code 690.1
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0. Introduction

In this paper, we deal with the important problem of managing complex distributed processes involving potentially thousands of participants. An example of such a process is the management of National Aeronautics and Space Administration (NASA) Databases. Improvement Subprocesses is a key ingredient of NASA Flight Projects which are the heart of NASA. Managing complex distributed processes is difficult due to the complexity of the subprocesses, the diversity of views of different organizations, and the diversity of views of managers and participants taking part in the subprocesses.

An outline of the paper is as follows:

In Section 1, we examine common problems that arise in the management of complex distributed processes. In Section 2, we provide an overview of tools that are solutions to these problems. In Section 3, we provide examples of these tools. In Section 4, we outline some complex distributed processes in the Federal Government that are applications of the methodology.

1. Problems

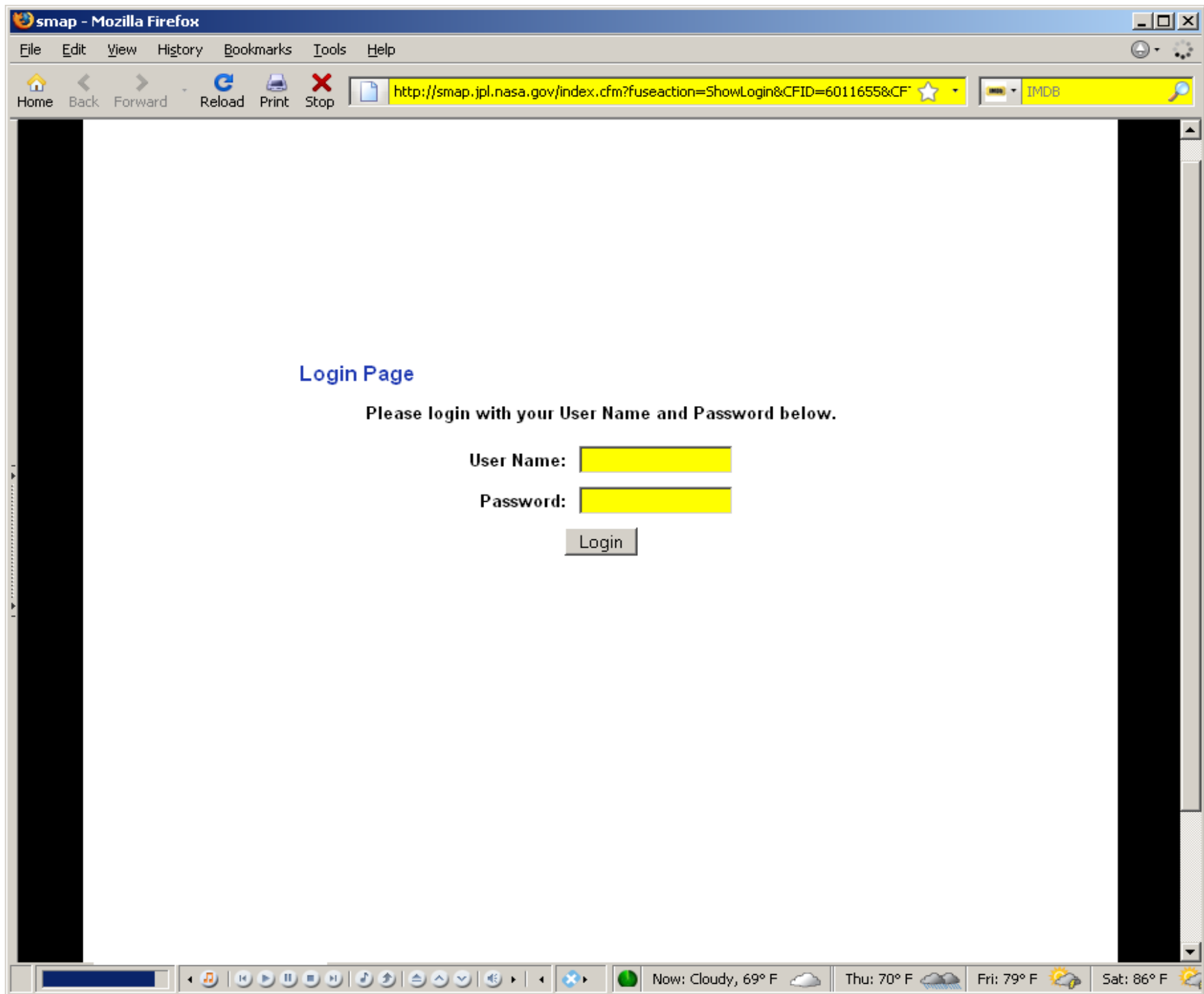
We discuss here some of the problems that are intrinsic to the management of complex distributed processes.

First, complex distributed processes tend to have lots of related subprocesses. For example, Figure 1(a) shows some of the subprocesses of Improvement Subprocesses. Notice that we organize the subprocesses into five categories: Product Realization, Product Distribution, Support, Improvement, and Common.

Second, for each subprocess, we tend to have multiple organizations, each having their own view of the subprocesses. For example, Figure 1(b) shows some of the organizations participating in the Improvement Subprocesses. In addition, there are also organizations that distribute the products that come out of the subprocesses as well as organizations that support and improve the subprocesses.

Third, within each subprocess organization, we have numerous managers and participants, each person having their own view of the subprocess. See Figure 1(c). It is very important that both managers and participants quickly learn and then establish integrated views for their roles in the subprocess.

Fourth, there are a number of important human factor issues that have to be dealt with in the management of subprocesses. See Figure 1(d). These factors reflect the life cycle of organizations that



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:

Mission Definition Review (MDR) Package

Thanks,

Barry

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Subprocess Worksheet

Classification: Improvement Subprocesses (T6-00-00-00)

Subprocess Type: ISO-9001-2000 (T6-1-00-00)

Organization: IMAGE

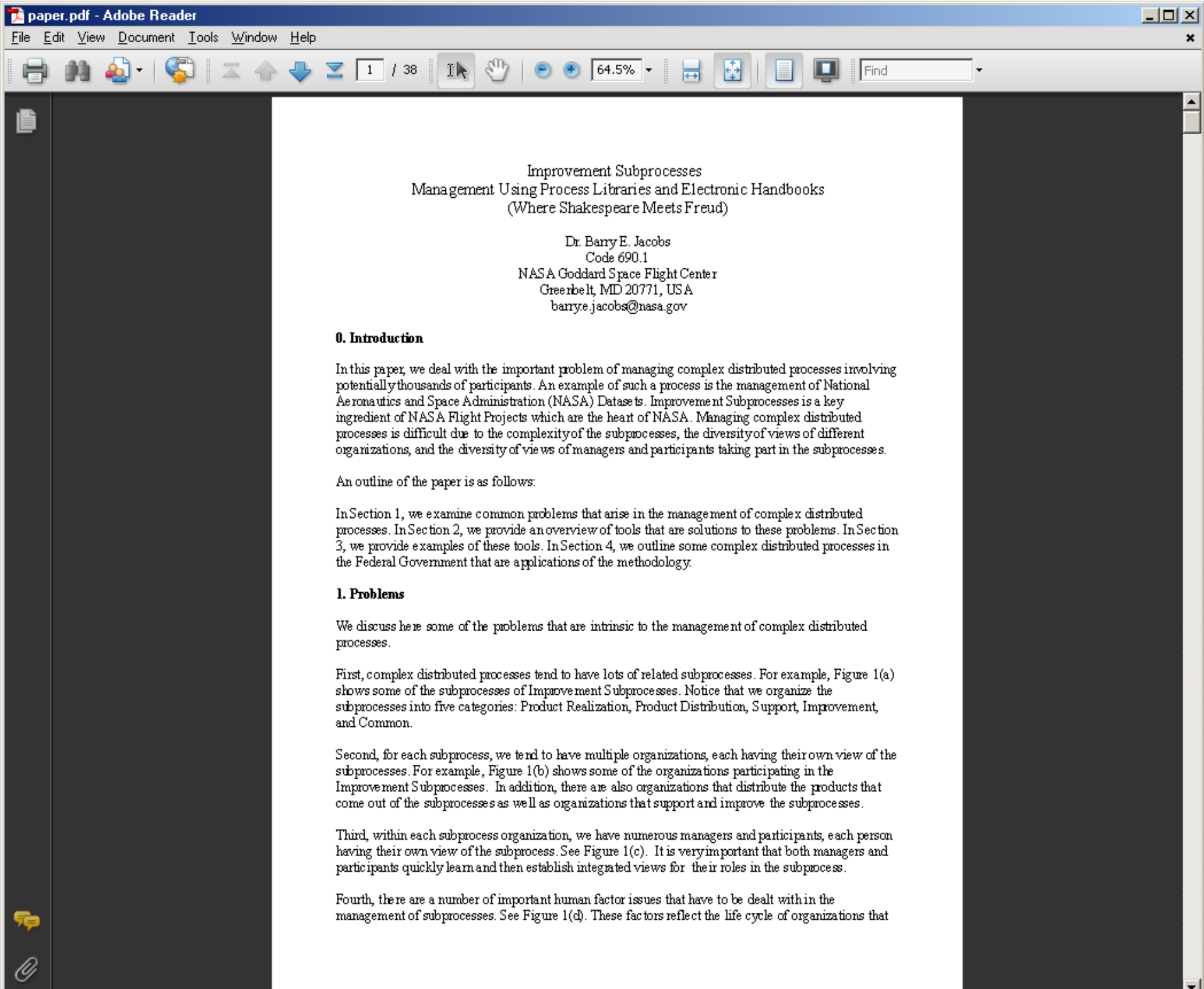
| Task | Purpose | Suggested Roles | Task Lead(s) | Estimated Completion Date | Actual Completion Date | Documents | | | | | |
|---|--|--|--------------|---------------------------|------------------------|---|--|------------------|---------------------------|------------------------|---------------------------------|
| | | | | | | 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 Phase D: Project Development . | 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 |
| Project Technical Products | The purpose of this task is to provide Technical products for the Flight Project. | Phase D Manager, Project Manager, Program Manager, Organization Manager, Overall Projects Manager, Task Lead, Subtask Lead, Reviewer, Approval Official, Documents Manager | James Green | 06/23/07 | 06/23/07 | Missile System Pre-Launch Safety Package (Update) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | As-built Hardware and Software Documentation (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Verification and Validation Report (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Operations Handbook (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Reviews | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Approvals | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| Project Planning, Cost, and Schedule Products | The purpose of this task is to provide Planning, Cost, and Schedule products for the Flight Project. | Phase D Manager, Project Manager, Program Manager, Organization Manager, Overall Projects Manager, Task Lead, Subtask Lead, Reviewer, | James Green | 07/23/07 | 07/23/07 | Work Agreement for Next Phase (Baseline) | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | Reviews | Instructions and Samples | James Green | 06/23/07 | 07/23/07 | Library: NS2034 |
| | | | | | | | | | | | |

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Improvement Subprocesses Management Using Electronic Handbooks - Mozilla Firefox

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ehbs.org/Improvement/summary/index.html

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Improvement Subprocesses 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](#))

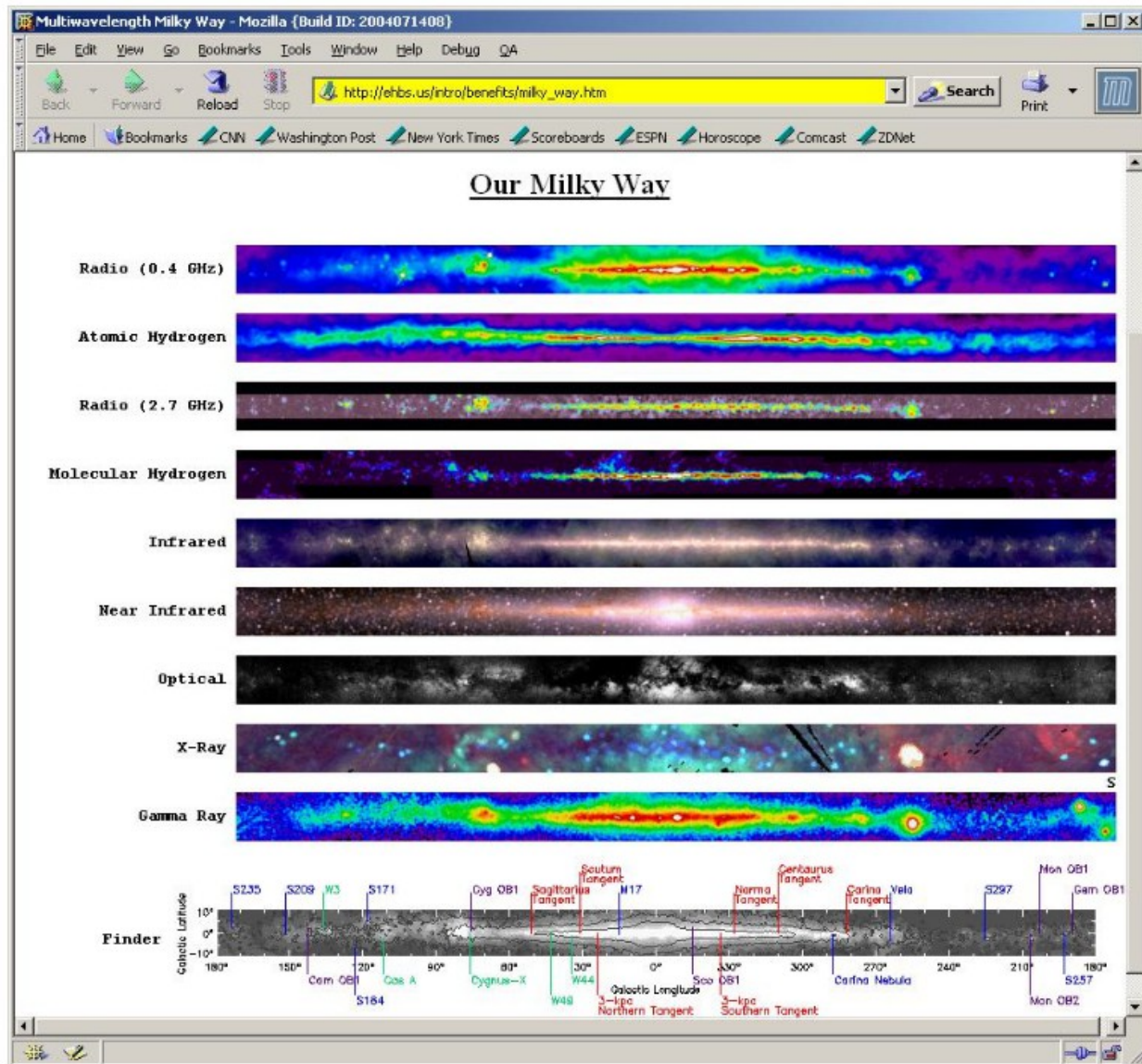
- [Cover](#)
- [The Bottom Line: Provide editable and cost-saving process documentation tools for process developers and participants to help them quickly and effectively learn, adapt, test, teach, and work together. These tools may be added to new or existing systems.](#)
- [Objective: Develop Internet-based 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.](#)
- [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.](#)

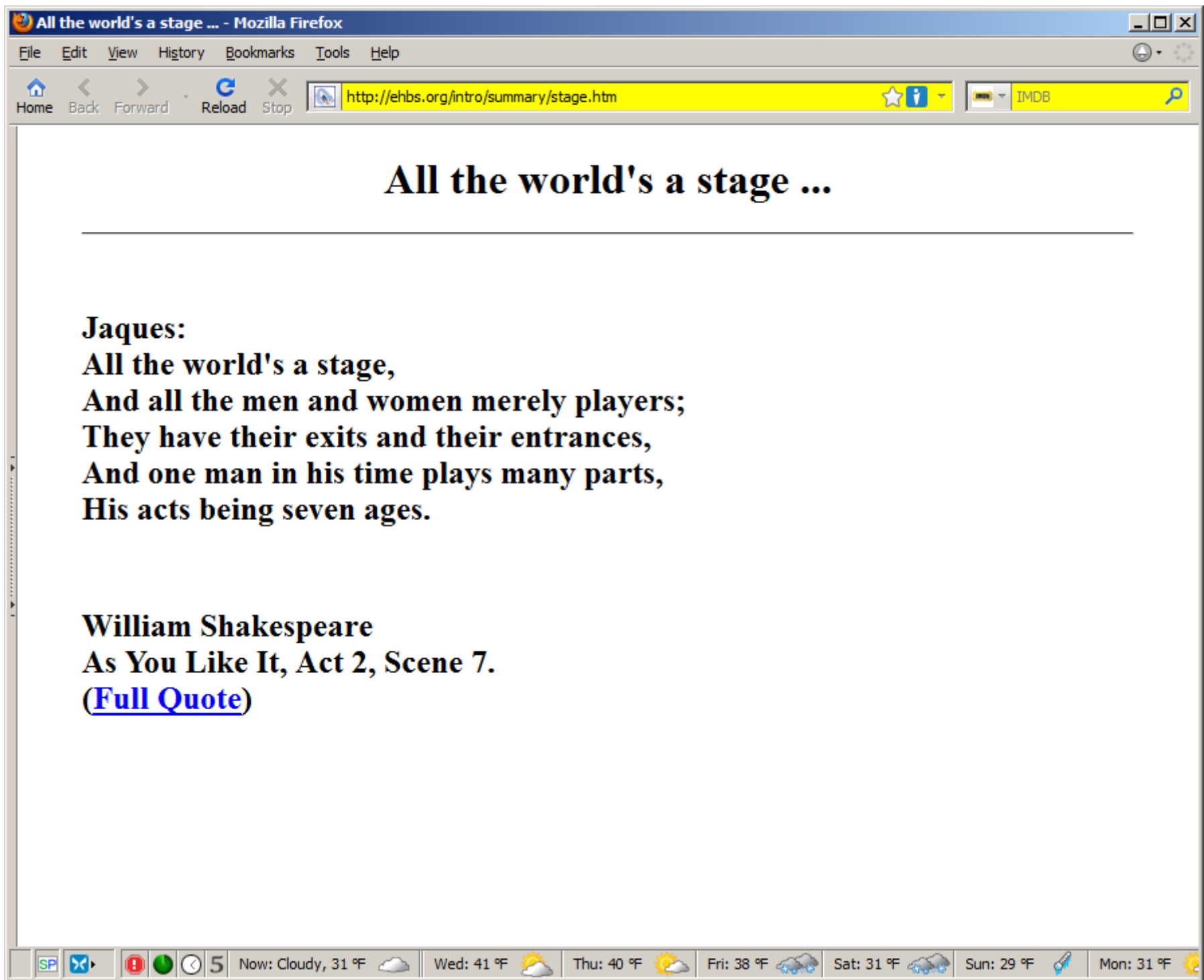
[http://ehbs.org/Improvement/summary/Objective.htm](#) here people pass-on only parts of the "message".

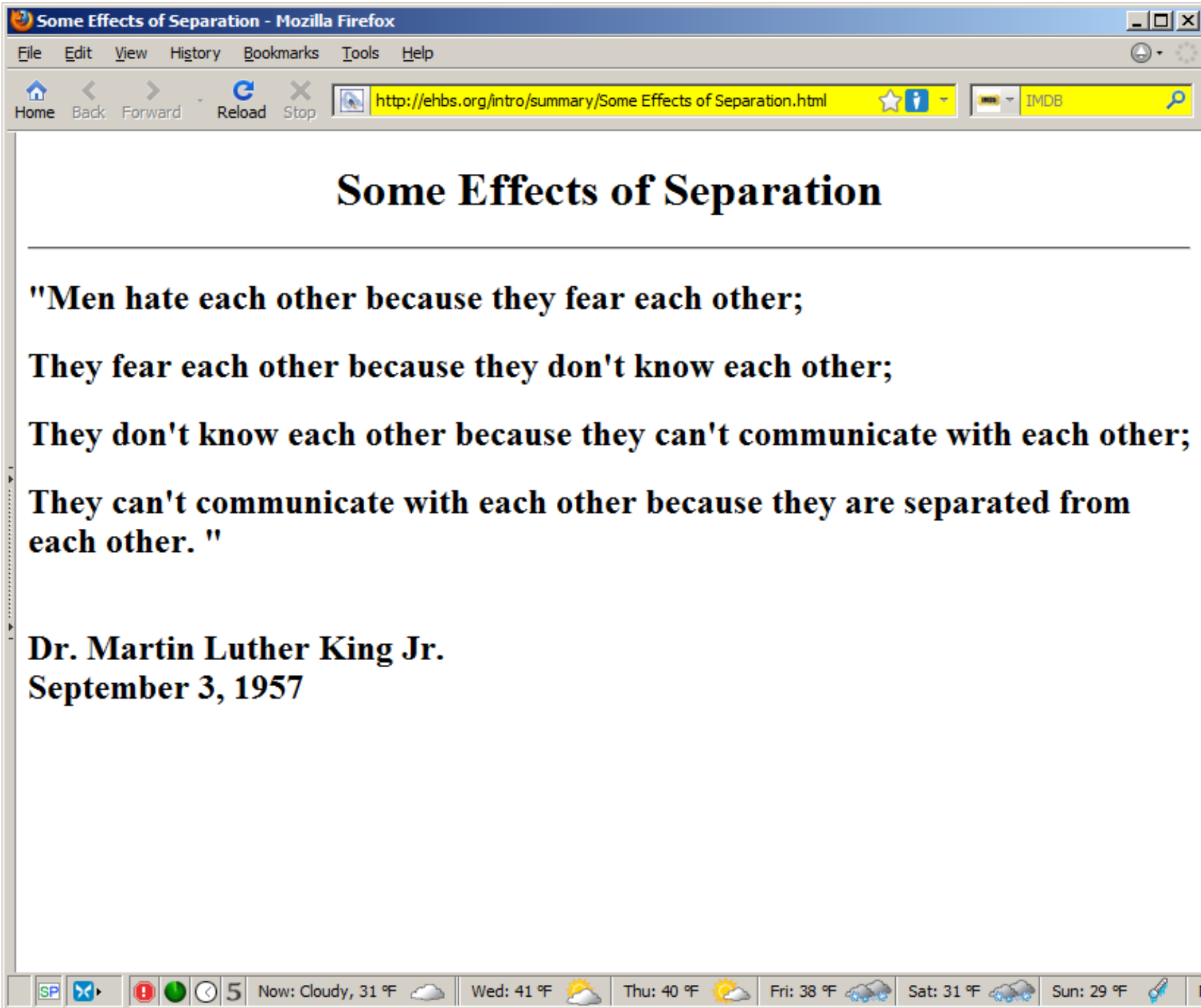
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We believe that to truly understand one's universe, one must see it thru multiple "eyes" and also have tools to "communicate" these views.







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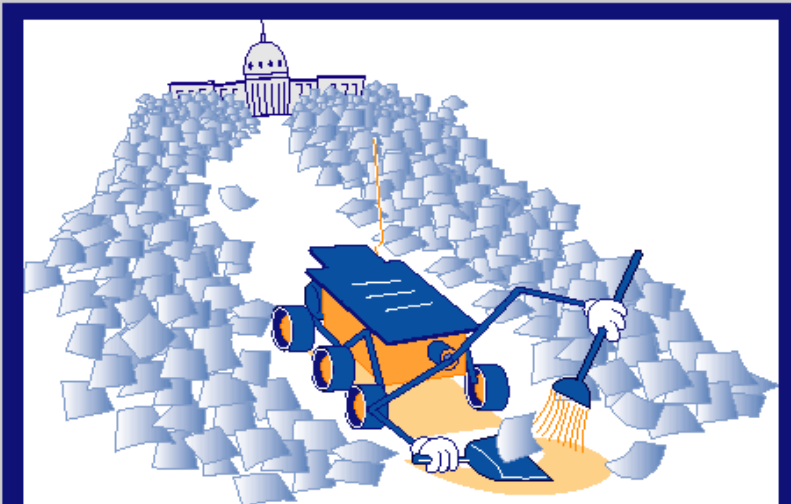
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