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Capabilities and Constraints 1.0

*<Program/Project or Solution Name>*

**U.S. Department of Housing and Urban Development**

# Solution Information

|  |  |
| --- | --- |
|  | Information |
| Solution Name | <Solution Name> |
| Solution Acronym | <Solution Acronym> |
| Project Number / Task Number | <From New Core Accounting System> |
| Document Owner | <Owner Name> |
| Primary Segment Sponsor | <Primary Segment Sponsor Name> |
| Version/Release Number | <Version/Release Number> |

# Document History

<Provide information on how the development and distribution of this document is controlled and tracked. Use the table below to provide the version number, date, author, and a brief description of the reason for creating the revised version.>

|  |  |  |  |
| --- | --- | --- | --- |
| Version No. | Date | Author | Revision Description |
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Contents

[Solution Information ii](#_Toc450562957)

[Document History ii](#_Toc450562958)

[Exhibit List iv](#_Toc450562959)

[1. Introduction 5](#_Toc450562960)

[1.1. Business Need 5](#_Toc450562961)

[1.2. Notes 5](#_Toc450562962)

[2. Capabilities 5](#_Toc450562963)

[2.1. Mission Capabilities 5](#_Toc450562964)

[2.2. Release Capabilities 5](#_Toc450562965)

[2.2.1. Decomposition of Approved Capabilities 6](#_Toc450562966)

[2.2.2. Work Share for Multiple Teams 6](#_Toc450562967)

[2.3. Reusable Service Capabilities 7](#_Toc450562968)

[2.4. Interface Capabilities 7](#_Toc450562969)

[3. Constraints 7](#_Toc450562970)

[3.1. Standard Constraints 7](#_Toc450562971)

[3.2. Timeframe Constraints 7](#_Toc450562972)

[3.3. Architecture and Design Constraints 8](#_Toc450562973)

[3.4. Suitability Constraints 8](#_Toc450562974)

[3.5. Performance Constraints 8](#_Toc450562975)

[3.6. Other Constraints 8](#_Toc450562976)

[4. Complete Listing of Potential Capabilities 8](#_Toc450562977)

[Appendix A: References 9](#_Toc450562978)

[Appendix B: Key Terms 9](#_Toc450562979)

# Exhibit List

[**Exhibit 1: Summary of Release Capabilities** 6](#_Toc450562980)

[**Exhibit 2: Release Decomposition** 6](#_Toc450562981)

[**Exhibit 3: Approved Capabilities Work Share** 6](#_Toc450562982)

[**Exhibit 4: Interface Capabilities** 7](#_Toc450562983)

[**Exhibit 6 Appendix A: References** 9](#_Toc450562984)

[**Exhibit 7 Appendix B: Key Terms** 9](#_Toc450562985)

# Introduction

The Capabilities and Constraints (CAC) document defines the highest level requirements for the program and focuses on the specific capabilities to be delivered in the release. It defines the scope and constraints that determine the program’s approach to fulfilling the goals. It is expected that the program, over time, will deliver the high-level capabilities specified in this document.

This document pertains to Release *<insert Release #>,* the *<first, second, third, etc.>* in a series of time-boxed releases that will deliver incremental functionality for the *<insert Project/Solution>*. Subsequent Capabilities and Constraints (CAC) documents will be developed for future releases.

## Business Need

<This section expresses the purpose for the existence of the program and is associated with the business need or direction (e.g. the program was created by order of the Secretary to satisfy a specific or set of goals or regulatory requirement). The Business Need describes the overall purpose of the system and the role that it fills within HUD. Describe the service this system will provide to its stakeholders.

## Notes

<Describe how the release will be developed (e.g., using existing tools, architecture, etc.)>

# Capabilities

The capabilities defined in this section include the high-level mission capabilities as well as the approved capabilities selected for Release *<insert Release #>.*

## Mission Capabilities

<This section should include a bulleted list of high-level capabilities for the system overall. (This section will generally change little from one release to the next.)>

It is expected that the program will deliver the high-level capabilities specified below. As the project progresses, these capabilities are further elaborated in the product backlog (PBK).

* <Approved Capability:> <Description>
* <Approved Capability:> <Description>
* <Approved Capability:> <Description>

## Release Capabilities

***Exhibit 1*** summarizes the approved capabilities, the benefits, and success scenario(s) for

<insert Project/Solution Name and Release #>.

<Identify the specific capabilities that are targeted for the release. Adjust rows and columns as necessary depending on the number of approved capabilities.>

**Exhibit 1: Summary of Release Capabilities**

|  |  |  |
| --- | --- | --- |
| Approved Capability | Benefit(s) | Success Scenario(s) |
| *<Capability>* |  |  |
| *<Capability>* |  |  |
| *<Capability>* |  |  |

### Decomposition of Approved Capabilities

<Decompose the high-level capabilities for this release by creating and/or updating **Exhibit 2** with the required information: "Capability", "Actor", "Features as Acceptance Criteria", "Status" (In Backlog, In Progress or Deployed).>

**Exhibit 2: Release Decomposition**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Capability | Actor | Feature  (Acceptance Criteria) | Priority | Status |
| *<Capability>* |  |  |  |  |
| *<Capability>* |  |  |  |  |
| *<Capability>* |  |  |  |  |

<Standard non-functional requirements do not need to be listed in the CAC unless the requirement deviates from the standard or the requirement is especially important. Standard non-functional requirements include:

* Performance, scalability, reliability
* Section 508 Amendment of the Rehabilitation Act of 1973 Compliance
* Security Compliance
* Continuity of Operations
* Enterprise Architecture Compliance

The project team should have decomposed the features into implementable stories in the Release Backlog. If there are particular stories that are required in order to meet the ATO criteria, identify them as such.>

### Work Share for Multiple Teams

<Consider the high-level capabilities approved for this release. If multiple teams will perform work in support of the capabilities, summarize the division of work among each team in **Exhibit 3**. Adjust rows and columns as necessary depending on the number of teams.>

**Exhibit 3: Approved Capabilities Work Share**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Approved Capability | <Team> | <Team> | <Team> | <Team> |
| *<Capability>* |  |  |  |  |
| *<Capability>* |  |  |  |  |
| *<Capability>* |  |  |  |  |

## Reusable Service Capabilities

< Identify and provide references to documents for any reusable service capabilities which will support the Agile project manager, product owner, architects and sponsors in their responsibilities for new development, modification, maintenance, integration or any other activities that result in the delivery of a software product or information system.

Also describe any new services reusable by other systems that are planned for this Release.>

## Interface Capabilities

<Report the interface capabilities that are targeted for <insert Release #> in **Exhibit 4**. Add rows as necessary depending on the number of interfaces.>

***Exhibit 4*** describes the interface capabilities targeted for *<insert Release #>.*

**Exhibit 4: Interface Capabilities**

|  |  |  |
| --- | --- | --- |
| System | Release | Interface Description |
| *<System Name>* |  |  |
| *<System Name>* |  |  |
| *<System Name>* |  |  |

# Constraints

<A constraint is a restriction that could impact the approach to system delivery. Constraints are effectively global requirements, such as limited development resources or a decision by senior management that restricts the way you develop a system. Constraints can be economic, political, technical, or environmental and pertain to your project resources, schedule, target environment, or to the system itself.>

## Standard Constraints

< Using bullets, state the standard constraints impacting the system. Listed below are a few examples:

Reference applicable artifacts for further definition.>

* Section 508 Compliance
* Security Compliance
* Enterprise Architecture Compliance

## Timeframe Constraints

<Identify any constraints which may impact the system delivery. Include any specific events and dates which have an impact on the delivery dates.>

## Architecture and Design Constraints

The *<insert Project/Solution Name and Release #>* will be following an agile life cycle approach. The architecture and design constraints for this program are documented in the Service Layered Architecture Profile (SLAP), *<insert reference>*. The SLAP provides project-specific architectural guidance and constraints in alignment with HUD’s Enterprise Technical Architecture (ETA). The ETA establishes a consistent, vendor-agnostic, and standards-based architecture to be used department-wide in the development of custom-built software.

<Project teams should reference and adopt the guidance provided in the SLAP when developing solutions. If the SLAP document prescribes architectural requirements or recommendations that hinder the solution development, the project team should contact the Enterprise Architecture team and initiate the waiver process to adjust architectural compliance as appropriate. Use this section to describe any additional architecture and design constraints that are applicable to this Release and not documented in the SLAP.>

## Suitability Constraints

<Identify and state any suitability constraints associated with this Release which may impact system delivery.>

## Performance Constraints

<Use this section to describe performance constraints that may impact system delivery. Reference associated documents to address these constraints.>

## Other Constraints

< Identify and state any other constraints not listed in this Section which may impact system delivery. Please provide a reference to any non-functional requirements or list them in bullet format.>

# Complete Listing of Potential Capabilities

The following is a list of all potential <Solution Name> capabilities that will be included in future releases.

* <Capability Name>
* <Capability Name>
* <Capability Name>

# Appendix A: References

<Insert the name, version number, description, and physical location of any documents referenced in this document. Add rows to the table as necessary.>

***Exhibit 6*** below summarizes the documents referenced in this document.

|  |  |  |
| --- | --- | --- |
| **Document Name** | **Description** | **Location** |
| <Document Name and Version Number> | <Document description> | <URL to where document is located> |
|  |  |  |
|  |  |  |

**Exhibit 6 Appendix A: References**

# Appendix B: Key Terms

*<Insert the terms and definitions for terms and acronyms relevant to the content presented within this document.>*

|  |  |
| --- | --- |
| Term | Definition |
| [Insert Term] | <Provide definition of term and acronyms used in this document.> |
|  |  |
|  |  |

**Exhibit 7 Appendix B: Key Terms**