|  |
| --- |
|  |

**Inh**altsverzeichni**s**

1. Allgemeines 3

1.1. Geltungsbereich 3

1.2. Zweck des Dokumentes 3

1.3. Abkürzungen 4

1.4. Referenzierte Unterlagen 4

1.5. Verzeichnis verwendeter Dokumente / Mitgeltende Unterlagen 4

2. Darstellung 4

2.1. Input 4

2.2. Output 4

2.3. Start und Ende 5

2.3.1. Start 5

2.3.2. Ende 5

2.4. Ablauf 6

2.5. Erläuterungen 8

3. Kennwerte und Metriken 8

4. Ausgabenübersicht 8

# Allgemeines

## Geltungsbereich

## Zweck des Dokumentes

## Abkürzungen

ACC Acceptance (process of acceptance)

DP Design Prime (ehemals DV)

D Design

DEV Developper

## Referenzierte Unterlagen

## Verzeichnis verwendeter Dokumente / Mitgeltende Unterlagen

|  |  |
| --- | --- |
| Dokument | Dateibezeichnung |
|  |  |
|  |  |

1. Verzeichnis verwendeter Dokumente

# Darstellung

## Input

|  |  |
| --- | --- |
| Bezeichnung | Aufbewahrung |
| Medium | Stelle | Dauer |
|  |  |  |  |
|  |  |  |  |

1. Verzeichnis Input

## Output

|  |  |
| --- | --- |
| Bezeichnung | Aufbewahrung |
| Medium | Stelle | Dauer |
|  |  |  |  |
|  |  |  |  |

1. Verzeichnis Output

## Start und Ende

### Start

### Ende

## Ablauf

Diese Zeile kann genauso wie die Tabellenzeile „Prozessname“ gelöscht werden (wenn nicht benötigt!)

|  |
| --- |
| Prozessname |
|  | # | Aktivität |  |  | Beschreibung/ System&Ablage / Template◄ Input/ ► Output / ♦ Entscheidung |  | Responsibilites |
|  | D | M | Info |
|  |
|  | 01 | « | Project assigned |  |  | After the project has been assigned the relevant documents are handed over to the design prime. The DP checks system architecture and TRS and consults with TSM/PA in case any clarification is needed. |  | DP | D |  |
|  |  | Handover of requirements and system architecture draft |  |  |  |
|  |  |  |  | in-Step: System specifications,System Design & Architecture |  | n/a |  |
|  |  |  | ◄ | System architecture [draft], TRS, URS, Project Assignment , Project Plan | ► | n/a |  |
|  |  |
|  | 02 | Planning of development (WBS) |  |  | Based on the actual project plan and the estimated efforts the DP creates a detailed WBS (tasks in in-Step) for the work packages within the SWD. |  | DP | PjM |  |
|  |  |  |  |  |
|  |  |  |  | in-Step: Project Management |  | n/a |  |
|  |  |  | ◄ | Project plan; estimation of efforts | ► | WBS |  |
|  |  |
|  | 03 | Refining system architecture |  |  | The draft of the system architecture is refined to a detailed level which is suitable for the SWD. After that the review of the system architecture (including specification of system interfaces) is performed and the document is reworked if necessary. Finally the reviewed SA is delivered to the processes of DOK, TM and OUT. |  | DP | D | PjM |
|  |  |  |  |  |
|  |  |  |  | in-Step: System specifications |  | SOP for document review |  |
|  |  |  | ◄ | System architecture [draft] | ► | System architectureSA to PB TM, PB\_OUT, PB\_DOK |  |
|  |  |  | ♦ **MILESTONE: System architecture REVIEWED** |  |
|  |  |
|  | 04 | Delivery planning |  |  | Based on the system architecture the strategy for delivery is derived. If this has an impact on the project plan, the latter is adjusted to conform to the strategy of delivery.System components are assigned to individual designers for creating the software architecture (see step 05). |  | DP |  | D |
|  |  |  |  |  |
|  |  |  |  | in-Step: System specifications |  | n/a |  |
|  |  |  | ◄ | System architecture | ► | Adjusted project planAssigned components |  |
|  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |

Diese Zeile kann genauso wie die Tabellenzeile „Prozessname“ gelöscht werden (wenn nicht benötigt!)

|  |
| --- |
| Prozessname |
|  | # | Aktivität |  |  | Beschreibung/ System&Ablage / Template◄ Input/ ► Output / ♦ Entscheidung |  | Responsibilites |
|  | D | M | Info |
|  |
|  | 05 | Creating software architecture |  |  | The software architecture (including specification of interfaces) is created and a review is performed. After the review the document is reworked if necessary. Finally the reviewed SWA is delivered to the processes of TM and OUT. |  | D | DP |  |
|  |  |  |  |  |
|  |  |  |  | in-Step: System Components |  | Template “software architecture”; SOP for document review |  |
|  |  |  | ◄ | System architecture | ► | Software architecture; SWA to PB TM, PB\_OUT |  |
|  |  |  | ♦ **MILESTONE: Software architecture REVIEWED** |  |
|  |  |  |  |
|  |  |
|  | 06 | Setup development environment |  |  | A service request regarding the development environment is entered in case a new environment is needed. This request is directed to the process DEL. |  | DP |  | PjM |
|  |  |  |  |  |
|  |  |  |  | n/a |  | n/a |  |
|  |  |  | ◄ | Software architecture | ► | Service request |  |
|  |  |
|  | 07 | Creating detailed design |  |  | Based on the software architecture the detailed design is created. Thereafter a review of the document(s) is performed and a rework is performed if necessary. Finally the reviewed DD is delivered to the processes of DOK and TM. |  | D | DP | PjM |
|  |  |  |  |  |
|  |  |  |  | in-Step: System Components |  | Template “detailed design”; SOP for document review |  |
|  |  |  | ◄ | Software architecture | ► | Detailed design; DD to PB TM, PB\_DOK |  |
|  |  |  | ♦ **MILESTONE: Detailed Design REVIEWED** |  |
|  |  |  |  |
|  |  |
|  | 08 | Assigning DD to developers |  |  | The design prime assigns any element of the detailed design to 1 developer who is then responsible for the creation of the code and the respective documentation. |  | DV |  | DEV |
|  |  |  |  |  |
|  |  |  |  | in-Step: System Components |  | “developer task” (in-Step) |  |
|  |  |  | ◄ | Detailed design | ► | Assigned developer tasks |  |
|  |  |

|  |
| --- |
| Prozessname |
|  | # | Aktivität |  |  | Beschreibung/ System&Ablage / Template◄ Input/ ► Output / ♦ Entscheidung |  | Responsibilites |
|  | D | M | Info |
|  |
|  | 09 | Unit development and testing |  |  | Software units are created and documented. Unit test plans are created and agreed by the respective designers. The unit test plans are executed and the results are reported within a test report.The scope of any code review is defined by the design prime and thereafter reviews are performed by the developers and designers who have been selected.In case code reviews or tests uncover defects a rework is performed and if necessary the reviews/tests are repeated. At the end all defects need to be solved and the documentation of the software units needs to be completed. |  | DEV | DP; D | PjM |
|  |  |  |  |  |
|  |  |  |  | in-Step: System specificationsProstar |  | “test plan” (in-Step)  |  |
|  |  |  | ◄ | Detailed design; risk analysisProblem tickets | ► | Test plan; review protocols; test reports; technical documentation; SW units |  |
|  |  |  | ♦ **MILESTONE: Code REVIEWED / Unit TESTED** |  |
|  |  |  |  |
|  |  |
|  | 10 | Load build |  |  | To build the load it is verified that all relevant units are checked in (into the repository). If this is the case, the build files are created as described in the design documents and the load build is executed. |  | DEV | DP |  |
|  |  |  |  |  |
|  |  |  |  | Repository |  | n/a |  |
|  |  |  | ◄ | System architecture; detailed design; SW units | ► | Build files, load |  |
|  |  |
|  | 11 | Performing sanity test |  |  | After the load is available a sanity test is performed. The sanity test might result in a need for reworking 1..n units. In any case the results are documented and a step back to #09 is performed if rework is needed. |  | Tester |  | DP |
|  |  |  |  |  |
|  |  |  |  | Repository |  | n/a |  |
|  |  |  | ◄ | Load | ► | Test results |  |
|  |  |  | ♦ | Sanity test OK |  | **Go to #12** |  |
|  |  |  | Sanity test NOK |  | **Back to #09 (Problem ticket)** |  |
|  |  |  |  | ♦ **MILESTONE: Sanity Test PASSED** |  |  |  |  |
|  |  |
|  | 12 | Integration testlevel 1-n /System testing |  |  | Testable objects are handed over (the status of the TO is set to “ready for test”) to the process TM and then tested there. After completion of the test a test report and if applicable problem tickets are returned and analysed here. If open problem tickets exist, these are assigned to the respective developers and a step back to #09 is performed.In case further aggregations are needed they are created according to the system or component architecture and thereafter fed into the TM again. This is repeated until the final aggregation (=system) is reached. |  | DP |  | TP, PjM |
|  |  |  |  |  |
|  |  |  |  | in-Step: System Design & Architecture, System Components |  | n/a |  |
|  |  |  | ◄ | System architecture; units and components | ► | Tested components; tested system |  |
|  |  |  | ♦ | Next aggregation needed |  | **Restart #12** |  |
|  |  |  | Final aggregation reached |  | **Go to #13** |  |
|  |  |  | Defect(s) detected |  | **Back to #09 (Problem ticket)** |  |
|  |  |  |  | ♦ **MILESTONE: Test level x COMPLETED / System TESTED** |  |  |  |  |

Diese Zeile kann genauso wie die Tabellenzeile „Prozessname“ gelöscht werden (wenn nicht benötigt!)

|  |
| --- |
| Prozessname |
|  | # | Aktivität |  |  | Beschreibung/ System&Ablage / Template◄ Input/ ► Output / ♦ Entscheidung |  | Responsibilites |
|  | D | M | Info |
|  |
|  | 13 | Preparing acceptance |  |  | After successful completion of the system test the acceptance plan is re-checked and reworked if necessary. Thereafter it is delivered to PB\_ACC and Acceptance is performed according to PB\_ACC.  |  | TP | DP | PjM |
|  |  |  |  |  |
|  |  |  |  | in-Step: Quality Assurance |  | “Acceptance Plan” (in-Step) |  |
|  |  |  | ◄ | Acceptance plan | ► | Acceptance plan |  |
|  |  |  |  | ♦ **MILESTONE: Ready for acceptance** |  |  |  |  |
|  |  |
|  | 14 | « | Problem ticket |  |  | In case any problem tickets are generated during ACC, these are assigned to the respective developers and a step back to #09 is performed. |  | DP | TP | PjM |
|  |  | Supporting acceptance |  |  |  |
|  |  |  |  | Prostar |  | n/a |  |
|  |  |  | ◄ | Problem tickets | ► |  |  |
|  |  |  | ♦ | No defects |  | **Go to #15** |  |
|  |  |  | Defect(s) detected |  | **Back to #09 (Problem ticket)** |  |
|  |  |
|  | 15 | Close down |  |  | Once acceptance has been successful the software development is completed. Final hand over to project management is performed and the development team is resolved.Lessons learned are collected and all relevant objects (code and documents) are stored in the accepted versions. |  | DP | PjM |  |
|  |  |  |  |  |
|  |  |  |  | n/a |  | n/a |  |
|  |  |  | ◄ | n/a | ► | Lessons learned; complete repository of objects |  |
|  |  |  |  | ♦ **MILESTONE: Acceptance COMPLETED** |  |  |  |  |

Diese Zeile kann genauso wie die Tabellenzeile „Prozessname“ gelöscht werden (wenn nicht benötigt!)

|  |
| --- |
| Prozessname |
|  | # | Aktivität |  |  | Beschreibung/ System&Ablage / Template◄ Input/ ► Output / ♦ Entscheidung |  | Responsibilites |
|  | D | M | Info |
|  |
|  | 88 | « | Auslöser |  |  | Beschreibung:* Unterpunkt1
* Unterpunkt2
 |  |  |  |  |
|  |  | Namen der Aktivität |  |  |  |
|  |  |  |  | System & Ablage |  | Template |  |
|  |  |  | ◄ | Input | ► | Output |  |
|  |  |  | ♦ | Ja – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |  | Nein – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |
|  | 88 | « | Auslöser |  |  | Beschreibung:* Unterpunkt1
* Unterpunkt2
 |  |  |  |  |
|  |  | Namen der Aktivität |  |  |  |
|  |  |  |  | System & Ablage |  | Template |  |
|  |  |  | ◄ | Input | ► | Output |  |
|  |  |  | ♦ | Ja – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |  | Nein – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |
|  | 88 | « | Auslöser |  |  | Beschreibung:* Unterpunkt1
* Unterpunkt2
 |  |  |  |  |
|  |  | Namen der Aktivität |  |  |  |
|  |  |  |  | System & Ablage |  | Template |  |
|  |  |  | ◄ | Input | ► | Output |  |
|  |  |  | ♦ | Ja – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |  | Nein – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |
|  | 88 | « | Auslöser |  |  | Beschreibung:* Unterpunkt1
* Unterpunkt2
 |  |  |  |  |
|  |  | Namen der Aktivität |  |  |  |
|  |  |  |  | System & Ablage |  | Template |  |
|  |  |  | ◄ | Input | ► | Output |  |
|  |  |  | ♦ | Ja – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |  | Nein – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |
|  | 88 | « | Auslöser |  |  | Beschreibung:* Unterpunkt1
* Unterpunkt2
 |  |  |  |  |
|  |  | Namen der Aktivität |  |  |  |
|  |  |  |  | System & Ablage |  | Template |  |
|  |  |  | ◄ | Input | ► | Output |  |
|  |  |  | ♦ | Ja – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |  | Nein – KANN ENTFALLEN |  | Weiter mit … |  |
|  |  |

Diese Zeilen sind nur ein Platzhalter für eine Erweiterung der Tabelle sowie Erklärung und können entfallen! Die Tabelle wird verlängert durch Kopieren der Tabellen-Elemente von der Zeile „Auslöser“ bis zur „Leerzeile am Tabellenende“ Die Zeile Auslöser kann bei Bedarf gelöscht werden, dabei muss jedoch die Rahmenlinie des Aktivitätenkästchens entfernt werden (Achtung in der Zuständigkeitsmatrix verändern sich dadurch die Formatierungen und müssen richtig gestellt werden „Ablauf-Tabell-Zentr“!). Finden KEINE Entscheidungen statt können die beiden grauen Zeilen ebenso gelöscht werden (ohne Einfluss auf die Formatierung!).

## Erläuterungen

# Kennwerte und Metriken

# Ausgabenübersicht

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Datum | Änderungsgrund | Änderungen |
|  |  |  |  |
|  |  |  |  |

1. Änderungsbeschreibung