

# On-Target 4D™ Software Development Methodology

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## Activity & Artifact Matrix

Roles	Software Development Life Cycle			
	Discover	Design	Develop	Deploy
<b>Analysis</b>	<ul style="list-style-type: none"> <li>❖ Conduct initial discovery effort</li> <li>❖ Identify and catalogue requirements</li> <li>❖ Provide initial vision of solution</li> <li>❖ Provide solution scenarios (use cases)</li> </ul> <ul style="list-style-type: none"> <li>▪ Scope Document</li> <li>▪ User Requirements Document</li> <li>▪ Conceptual Design</li> </ul>	<ul style="list-style-type: none"> <li>❖ Participate in technical drill down sessions</li> <li>❖ Clarify requirements</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assist with unit and integration testing</li> <li>❖ Assist with QA testing.</li> <li>❖ Continue to clarify requirements</li> <li>❖ Prepare for User Acceptance Testing</li> </ul> <ul style="list-style-type: none"> <li>▪ User Guide</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assist users with User Acceptance Test</li> <li>❖ Assist with User and Production Support training</li> </ul> <ul style="list-style-type: none"> <li>▪ Release Notes</li> </ul>
<b>Development</b>	<ul style="list-style-type: none"> <li>❖ Assist with development of solution scenarios.</li> <li>❖ Provide initial technology recommendations; a statement within the Conceptual Design document.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Conduct technical drill down of Conceptual Design.</li> <li>❖ Determine development and production environment requirements</li> <li>❖ Identify data conversion plan</li> <li>❖ Determine system architecture</li> <li>❖ Prepare design models</li> <li>❖ Prepare work packages for developers</li> </ul> <ul style="list-style-type: none"> <li>▪ Sequence diagrams</li> <li>▪ Class diagrams</li> <li>▪ Entity-Relationship diagram</li> <li>▪ Component diagram</li> <li>▪ UI design</li> </ul>	<ul style="list-style-type: none"> <li>❖ Prepare code</li> <li>❖ Conduct unit and integration tests</li> <li>❖ Modify system design documents based upon actual construction</li> </ul> <ul style="list-style-type: none"> <li>▪ System code, stored procedures, databases.</li> <li>▪ Implementation scripts.</li> <li>▪ Data conversion routines.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Assist with User Acceptance Test.</li> <li>❖ Assist with production deployment.</li> </ul> <ul style="list-style-type: none"> <li>▪ Installation instructions</li> <li>▪ Production Support instructions.</li> </ul>

Roles	Software Development Life Cycle			
		❖ Activities    -Artifacts		
<b>Quality Assurance</b>	<p align="center"><b>Discover</b></p> <ul style="list-style-type: none"> <li>❖ Determine Test Strategy: an optional statement within the Scope document</li> <li>❖ Define Test Plan; a statement within the Conceptual Design document</li> </ul>	<p align="center"><b>Design</b></p> <ul style="list-style-type: none"> <li>❖ Begin preparation of test cases</li> <li>❖ Participate in initial technical drill down sessions. <ul style="list-style-type: none"> <li>▪ Test Cases</li> <li>▪ Test Environment Requirements</li> </ul> </li> </ul>	<p align="center"><b>Develop</b></p> <ul style="list-style-type: none"> <li>❖ Update Test Cases based upon system modifications</li> <li>❖ Prepare test results reports <ul style="list-style-type: none"> <li>▪ Test Report</li> <li>▪ Test Summary Report</li> </ul> </li> </ul>	<p align="center"><b>Deploy</b></p> <ul style="list-style-type: none"> <li>❖ Assist with User Acceptance Test <ul style="list-style-type: none"> <li>▪ User Acceptance Test Results</li> </ul> </li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>❖ Provide initial infrastructure technology recommendations; a statement within the Conceptual Design document</li> </ul>	<ul style="list-style-type: none"> <li>❖ Determine Production Environment Requirements</li> <li>❖ Participate in initial technical drill down sessions (optional) <ul style="list-style-type: none"> <li>• Physical infrastructure diagram</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Prepare Development and QA environments</li> <li>❖ Deploy promotion candidate to QA environment <ul style="list-style-type: none"> <li>• System configuration documentation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Deploy system to Production environment</li> </ul>

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		❖ Activities -Artifacts		
	<b>Discover</b>	<b>Design</b>	<b>Develop</b>	<b>Deploy</b>
<b>Project Management</b>	<ul style="list-style-type: none"> <li>❖ Build project team</li> <li>❖ Provide initial Project Approach; a statement within the Scope document</li> <li>❖ Provide project schedules and budgets</li> <li>❖ Identify and track Risks and Issues</li> <li>❖ Provide initial Deployment Plan; a statement within the Conceptual Design document               <ul style="list-style-type: none"> <li>▪ Project Schedule</li> <li>▪ Project Budget</li> <li>▪ Risk Matrix</li> <li>▪ Contact List</li> <li>▪ Issues Log</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Participate in technical drill down sessions</li> <li>❖ Update project schedule, budget, and issues log</li> </ul>	<ul style="list-style-type: none"> <li>❖ Update project schedule, budget, and issues log               <ul style="list-style-type: none"> <li>• Release Bundle</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Coordinate promotion to Production Environment               <ul style="list-style-type: none"> <li>▪ Project Post Mortem Summary</li> </ul> </li> </ul>
<b>Configuration Management</b>	<ul style="list-style-type: none"> <li>❖ Establish artifact repository</li> <li>❖ Establish project artifact and code branching controls</li> <li>❖ Establish change management controls</li> </ul>		<ul style="list-style-type: none"> <li>❖ Collect system artifacts and components associated with system promotion candidate</li> </ul>	<ul style="list-style-type: none"> <li>❖ Baseline all system components and artifacts associated with production system</li> </ul>