Cradle-7
From concept to creation...

3SL

Product Range

Product Range Highlights

- Applies to agile and phase projects
- Application lifecycle management
- Requirements management
- Modeling / MBSE / SysML / UML
- Full lifecycle integration
- V&V
- Reporting
- Document publishing
- Metrics
- Dashboards
- Project plans
- User-defined UIs
- Custom web UIs
- Configuration management
- Single-user and multi-user

Integrated Systems Engineering from the Desktop to the Enterprise

Manage all information for the entire lifecycle with full traceability, metrics, quality checks and performance indicators, all linked to your project schedules

Cradle is a complete multi-user solution to manage, trace and document all data in your agile and phase-based projects.

You can capture information from external documents and tools, and track changes. You can build new sets of requirements, analysis, architecture and design models, tests or verifications, and link them to the source data and to each other. You can check the consistency and quality of this information, and prove the integrity of the models and other data with bi-directional coverage and traceability analyses.

You can raise customers' confidence with proof that your work satisfies its sources and constraints, and will meet their needs.

You can easily track progress with metrics and KPIs and link to your WBS and actual progress to your project planning tools.

Manage users' work with user-defined CM, workflows and access controls, and multi-team collaboration and discussions.

Cradle is a complete product range, from single-user requirements management to enterprise scale, multi-user collaborative environments. All are fully compatible with each other, sharing their architecture, database and I/O formats. You can start with a single-user tool and migrate to the multi-user Cradle Enterprise product, seamlessly and easily.

All Cradle systems include:

- Introductory overview
- Tutorial, to teach the UI
- Start Page of shortcuts in the UI for new users
- A guide to creating and working in a new project
- Example configurations suitable for many different processes, each with its own process guide
- A range of user guides
- Fully indexed, searchable help

Cradle supports all variants of Windows and Linux. Different platforms can be mixed in a Cradle deployment. Cradle servers are designed to run 24x7, unattended, and need no administration. No routine upkeep is needed.

Supports virtual servers and clients. Supports IPv4 and IPv6. May be served as SaaS using all popular web and

- Supports the full systems development lifecycle at system, subsystem and lower levels
- Integrates in one product features normally spread across separate tools from different vendors
- Completely user-definable and user-extensible with point-and-click UIs
- Manage any information, including requirements, models, risks, interfaces, tests and verifications
- Built-in CM, baselines, formal change control and user-defined workflows
- Scalable to millions of items of information
- Scalable from one to thousands of users
- Web and desktop applications, user-definable UIs
- Rapid deployment facilities
- Embed process in tool UIs, minimized user training

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non-web remote deployment tools. Can be served via firewalls and from DMZs.

Includes access, security and licence usage logs, and a range of reporting tools.

Supported Platforms

Component	Details
Windows	7 SP1, 8.1, 10 (32/64-bit) Server 2008 R2 SP1 (32/64-bit) Server 2012 (64-bit) Server 2012 R2 (64-bit) Server 2016 (64-bit)
Linux	Any 32/64-bit with a kernel ≥ 2.6.32
PDF Viewer	Acrobat/Reader 9 or later
Web Browser	IE, Firefox, Chrome, Edge: latest available
Microsoft Office	2007 SP3 (32-bit) 2010 SP2 (32/64-bit) 2013 SP1 (32/64-bit) 2016 (32/64-bit)
Other Office	OpenOffice ≥ 4, LibreOffice ≥ 5

Deployment

Cradle systems are installed on your computers. Cradle is also available as SaaS in a subscription where you choose the Cradle features required, the number of users to be supported, and how long you want to use Cradle.

Product Characteristics and Features

Characteristics and Features	RM Desktop	RM Pro	SE Desktop	SE Pro	Enterprise	Subscription
Deployment	In-house on your computers					SaaS
Users	Single-user				Multi-user	
Technical Support	7 days installation assistance				✓	✓
Product Upgrades					✓	✓
Unlimited databases, items/database, user-defined schemas	✓	✓	✓	✓	✓	✓
User-defined data types / link to external data and tools	✓	✓	✓	✓	✓	✓
User-defined item calculations					✓	✓
Load from external documents / import and export	✓	✓	✓	✓	✓	✓
User-defined queries, views, forms, matrices, pivot tables, graphs, metrics, KPIs and dashboards	✓	✓	✓	✓	✓	✓
User-defined process-oriented UI, customized by user / team					✓	✓
Graphical traceability views / many-to-many & cross-lifecycle transitive links / lifecycle-wide traceability and coverage	✓	✓	✓	✓	✓	✓
Create requirements, issues, verifications, test cases …	✓	✓	✓	✓	✓	✓
Quality check and spell check information	✓	✓	✓	✓	✓	✓
Create models (MBSE) / link models to all other information / consistency check models			✓	✓	✓	✓
Performance analyze architectures / reverse engineer software to models / code generate models to software					✓	
User-defined reports	✓	✓	✓	✓	✓	✓
User-defined documents (Word)		✓		✓	✓	✓
Track database items to formal project documents					✓	✓
Publish database to websites / custom web UIs					✓	
Bidirectional links to plans/schedules	✓	✓	✓	✓	✓	✓
CM system (reviews, baselines, formal change control…)					✓	✓
Change histories with options to reverse edits	✓	✓	✓	✓	✓	✓
User and team setup with optional LDAP support / user-defined access controls					✓	✓
External tool integration support					✓	✓
API / command line utilities and batch mode support					✓	✓
Multi-lingual databases and UI (cy, de, en, fr, ko, nl, ru, zh)	✓	✓	✓	✓	✓	✓
Messaging and email / collaboration (discussions, comments)					✓	✓

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Cradle-RM Desktop

Product Highlights

- Applies to agile and phase projects
- Application lifecycle management
- Requirements management
- Full lifecycle integration
- V&V
- Reporting
- Metrics
- Dashboards
- Project plans
- Compliance management
- Single user

Requirements Management Across the Systems Lifecycle

Complete Application Lifecycle Management (ALM) and Requirements Management (RM) solution for the entire project lifecycle, fully user-definable and applicable to all agile and phase-based processes

Cradle-RM Desktop is a complete solution to manage and trace all the data for your agile and phase-based projects.

You can capture information from external documents and tools, and track changes in these sources. You can build new sets of requirements, functions, components, interfaces, tests or verifications, and link them to the source data and to each other. You can check the quality and structure of this information, and prove the integrity of information with bi-directional coverage and traceability analyses.

You can raise customers' confidence with proof that your work satisfies its sources, complies with its constraints, and will meet their needs.

You can easily track progress with metrics and KPIs and link to your WBS and actual progress to your project planning tools.

You can create any number of databases, each with a schema and multiple projects that contain any number of items of any number of user-defined item types. Each item has any number of attributes with up to 1 TByte of data, held in Cradle, or referenced in files, URLs or other tools.

All items can be linked with user-defined types of cross reference. The links have attributes to justify, explain or parametize them. Links are direct and indirect, for full lifecycle traceability, impact and coverage analyses.

External documents can be loaded into hierarchies of items. Every item in Cradle is linked to its source in a document. Changes in new document versions are automatically found and the database updated. You can prove the integrity of all source data to your customers with a range of detailed coverage analyses of their documents.

Items can be linear, hierarchical and in many-to-many relationships. Items can be split, merged and reordered. All information can be shared and reused.

- Supports the full systems development lifecycle at system, subsystem and lower levels
- Integrates in one product features normally spread across separate tools from different vendors
- Completely user-definable and user-extensible with point-and-click UIs
- Manage any information, including requirements, risks, interfaces, tests and verifications
- Scalable to millions of items of information
- Full traceability of data from external sources and version management of source documents
- Full traceability and coverage analyses
- User-definable views of data including tables, trees, documents, matrices, diagrams and graphs
- User-defined metrics and management dashboards

Cradle can support product ranges, models, variants and builds, and generate comparative analyses between them as tables, pivot tables and matrices.

Cradle tracks all edits

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to every requirement, test case, verification and all other information that you want it to hold. Edits can be reversed selectively or by group. Full or partial change logs are readily available.

You define how information is viewed and reported in any number of views, shown as nested tables, trees, matrices, pivot tables, and as diagrams.

You can manage your projects with:

- Metrics, user-defined calculations of items' values
- Key Performance Indicators (KPIs) results of metric calculations with color-coded display bands
- Bi-directional links to Project, including user task lists and actual progress reporting

Cradle is open. It supports many import/export formats, has several interface mechanisms to link to other tools, and connects to the Microsoft Office® components Word, Excel, PowerPoint, Visio and Project.

Cradle is simple to customize and use. You do not need to learn a scripting language or become a programmer to tailor it to your process. After every change to your schema, Cradle will automatically update collections of queries, views and other definitions that make you productive immediately.

Major Features

Product and Tool Capabilities	
Supports full system lifecycle	Agile and phase processes
Process independent	Supports RM
Supports managing functions and components	Supports test management
Manage Cost and System Breakdown Structures	Supports feature-driven development (FDD)
Supports project V&V	Load source documents (text, tables, figures and links)
Manage source document versions and differences	Full lifecycle transitive traceability and coverage
User-defined items and attributes	User-defined link types, link rules and link attributes
Spell checking	Quality (conformance) checks
Direct editing in tables and in user-defined forms	1:1, 1:N, M:N linking of all items
Drag-and-drop linking	Graphical traceability views
User-defined queries, views, forms, hierarchies, navigations	Make child, sibling, hierarchy
Split and merge items	Reordering of item hierarchies
Suspect item displays	User-defined metrics
Automated change histories	User-defined calculations
User-defined progress graphs	User-defined pivot tables
User-defined matrices	Automated WBS and progress reporting
User-defined dashboards and KPIs	User-defined reports to CSV, Word, HTML, Excel
User-defined Start Page UIs	User-defined commands in table views
Import/export for XML (any schema), CSV, Cradle	Automated batch reporting from command line utilities

Supported Platforms

Component	Details
Windows	7 SP1, 8.1, 10 (32/64-bit) Server 2008 R2 SP1 (32/64-bit) Server 2012 (64-bit) Server 2012 R2 (64-bit) Server 2016 (64-bit)
Linux	Any 32/64-bit with a kernel ≥ 2.6.32
PDF Viewer	Acrobat/Reader 9 or later
Web Browser	IE, Firefox, Chrome, Edge: latest available
Microsoft Office	2007 SP3 (32-bit) 2010 SP2 (32/64-bit) 2013 SP1 (32/64-bit) 2016 (32/64-bit)
Other Office	OpenOffice ≥ 4, LibreOffice ≥ 5

Characteristics

Characteristic		Details
Users		Single
Modules Included		PDM REQ MET DASH
Project databases		Unlimited
Items / database		Unlimited
Links / database		Unlimited
Limits	Per database	≤ 25 item types ≤ 50 categories
	Per item	≤ 25 frames

Cradle-RM Desktop is part of the Cradle product range. The full, multi-user, product is Cradle Enterprise.

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Cradle-RM Pro

Product Highlights

- Applies to agile and phase projects
- Application lifecycle management
- Requirements management
- Full lifecycle integration
- V&V
- Reporting
- Document publishing
- Metrics
- Dashboards
- Project plans
- Compliance management
- Single user

Requirements Management Across the Systems Lifecycle

Complete Application Lifecycle Management (ALM), Requirements Management (RM) and documentation solution for the entire project lifecycle, fully user-definable and applicable to all agile and phase-based processes

Cradle-RM Pro is a complete solution to manage, trace and document all the data for your agile and phase-based projects.

You can capture information from external documents and tools, and track changes in these sources. You can build new sets of requirements, functions, components, interfaces, tests or verifications, and link them to the source data and to each other. You can check the quality and structure of this information, and prove the integrity of information with bi-directional coverage and traceability analyses.

You can raise customers' confidence with proof that your work satisfies its sources, complies with its constraints, and will meet their needs.

You can easily track progress with metrics and KPIs and link to your WBS and actual progress to your project planning tools.

You can create any number of databases, each with a schema and multiple projects that contain any number of items of any number of user-defined item types. Each item has any number of attributes with up to 1 TByte of data, held in Cradle, or referenced in files, URLs or other tools.

All items can be linked with user-defined types of cross reference. The links have attributes to justify, explain or parametize them. Links are direct and indirect, for full lifecycle traceability, impact and coverage analyses.

External documents can be loaded into hierarchies of items. Every item in Cradle is linked to its source in a document. Changes in new document versions are automatically found and the database updated. You can prove the integrity of all source data to your customers with a range of detailed coverage analyses of their documents.

Items can be linear, hierarchical and in many-to-many relationships. Items can be split, merged and reordered. All information can be shared and reused.

- Supports the full systems development lifecycle at system, subsystem and lower levels
- Integrates in one product features normally spread across separate tools from different vendors
- Completely user-definable and user-extensible with point-and-click UIs
- Manage any information, including requirements, risks, interfaces, tests and verifications
- Scalable to millions of items of information
- Full traceability of data to source and generated documents with complete version management
- Full traceability and coverage analyses
- User-definable views of data including tables, trees, documents, matrices, diagrams and graphs
- User-defined metrics and management dashboards

Cradle can support product ranges, models, variants and builds, and generate comparisons between them as tables, pivot tables and matrices.

Cradle tracks all edits to every requirement, test case, verification

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and all other information that you want it to hold. Edits can be reversed selectively or by group. Full or partial change logs are readily available.

You define how information is viewed and reported in any number of views, shown as nested tables, trees, matrices, pivot tables, and as diagrams.

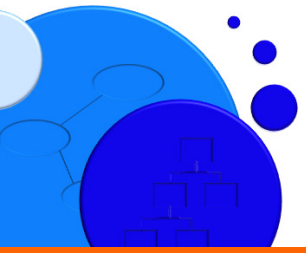
Generate versions of documents such as a URD, SRD, IRS, SDS and SSDS to match your or your client's formats with user-defined templates and detailed traceability of which items were published in each document issue.

You can manage your projects with:

- Metrics, user-defined calculations of items' values
- Key Performance Indicators (KPIs) results of metric calculations with color-coded display bands
- Bi-directional links to Project, including user task lists and actual progress reporting

Cradle is open. It supports many import/export formats, has several interface mechanisms to link to other tools, and connects to the Microsoft Office® components Word, Excel, PowerPoint, Visio and Project.

Cradle is simple to customize and use. You do not need to learn a scripting language or become a programmer to tailor it to your process. After every change to your schema, Cradle will automatically update collections of queries, views and other definitions that make you productive immediately.



Major Features

Product and Tool Capabilities	
Supports full system lifecycle	Agile and phase processes
Process independent	Supports RM
Supports managing functions and components	Supports test management
Manage Cost and System Breakdown Structures	Supports feature-driven development (FDD)
Supports project V&V	Load source documents (text, tables, figures and links)
Manage source document versions and differences	Full lifecycle transitive traceability and coverage
User-defined items and attributes	User-defined link types, link rules and link attributes
Spell checking	Quality (conformance) checks
Direct editing in tables and in user-defined forms	1:1, 1:N, M:N linking of all items
Drag-and-drop linking	Graphical traceability views
User-defined queries, views, forms, hierarchies, navigations	Make child, sibling, hierarchy
Split and merge items	Reordering of item hierarchies
Traceability to/from document versions	User-defined document templates
Suspect item displays	User-defined metrics
Automated change histories	User-defined calculations
User-defined progress graphs	User-defined pivot tables
User-defined matrices	Automated WBS and progress reporting
User-defined dashboards and KPIs	User-defined reports to CSV, Word, HTML, Excel
User-defined Start Page UIs	User-defined commands in table views
Import/export for XML (any schema), CSV, Cradle	Automated batch reporting from command line utilities

Supported Platforms

Component	Details
Windows	7 SP1, 8.1, 10 (32/64-bit) Server 2008 R2 SP1 (32/64-bit) Server 2012 (64-bit) Server 2012 R2 (64-bit) Server 2016 (64-bit)
Linux	Any 32/64-bit with a kernel ≥ 2.6.32
PDF Viewer	Acrobat/Reader 9 or later
Web Browser	IE, Firefox, Chrome, Edge: latest available
Microsoft Office	2007 SP3 (32-bit) 2010 SP2 (32/64-bit) 2013 SP1 (32/64-bit) 2016 (32/64-bit)
Other Office	OpenOffice ≥ 4, LibreOffice ≥ 5

Characteristics

Characteristic		Details
Users		Single
Modules Included		PDM REQ MET DASH DOC
Project databases		Unlimited
Items / database		Unlimited
Links / database		Unlimited
Limits	Per database	≤ 25 item types ≤ 50 categories
	Per item	≤ 25 frames

Cradle-RM Pro is part of the Cradle product range. The full, multi-user, product is Cradle Enterprise.

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Cradle-SE Desktop

Product Highlights

- Applies to agile and phase projects
- Application lifecycle management
- Requirements management
- Modeling / MBSE
- Full lifecycle integration
- V&V
- Reporting
- Metrics
- Dashboards
- Project plans
- Compliance management
- Single user

Model Based Systems Engineering Across the Systems Lifecycle

Complete Application Lifecycle Management (ALM) and Model Based Systems Engineering (MBSE) solution for the entire project lifecycle, fully user-definable and applicable to all agile and phase-based processes

Cradle-SE Desktop is a complete solution to manage and trace all the data for your agile and phase-based projects.

You can capture information from external documents and tools, and track changes. You can build new sets of requirements, analysis, architecture and design models, tests or verifications, and link them to the source data and to each other. You can check the consistency and quality of this information, and prove the integrity of the models and other data with bi-directional coverage and traceability analyses.

You can raise customers' confidence with proof that your work satisfies its sources and constraints, and will meet their needs.

You can easily track progress with metrics and KPIs and link to your WBS and actual progress to your project planning tools.

You can create any number of databases, each with a schema and multiple projects that contain any number of items of any number of user-defined item types. Each item has any number of attributes with up to 1 TByte of data, held in Cradle, or referenced in files, URLs or other tools.

All items can be linked with user-defined types of cross reference. The links have attributes to justify, explain or parametize them. Links are direct and indirect, for lifecycle traceability, impact and coverage analyses.

External documents can be loaded into hierarchies of items. Every item in Cradle is linked to its source in a document. Changes in new document versions are automatically found and the database updated. You can prove the integrity of your source data to customers with a range of detailed coverage analyses of their documents.

Items can be linear, hierarchical and in many-to-many relationships. Items can be split, merged and reordered. All information can be shared and reused. Cradle can support product ranges, models, variants and builds, and compare them in tables, pivot tables and matrices.

- Supports the full systems development lifecycle at system, subsystem and lower levels
- Integrates in one product features normally spread across separate tools from different vendors
- Completely user-definable and user-extensible with point-and-click UIs
- Manage any information, including requirements, models, risks, interfaces, tests and verifications
- Scalable to millions of items of information
- Full traceability of data from external sources and version management of source documents
- Full traceability and coverage analyses
- User-definable views of data including tables, trees, documents, matrices, diagrams and graphs
- User-defined metrics and management dashboards

Create any number of analysis, process, architecture and design models using UML, SASD, IDEF, ADARTS, SysML and other notations. Optionally group models in hierarchies and link all elements of all models to requirements, SBS,

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issues, test cases and all other information.

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You define how information is viewed and reported in any number of views, shown as nested tables, trees, matrices, pivot tables, and as diagrams.

You can manage your projects with:

- Metrics, user-defined calculations of items' values
- Key Performance Indicators (KPIs) results of metric calculations with color-coded display bands
- Bi-directional links to Project, including user task lists and actual progress reporting

Cradle is open. It supports many import/export formats, has several interface mechanisms to link to other tools, and connects to the Microsoft Office® components Word, Excel, PowerPoint, Visio and Project.

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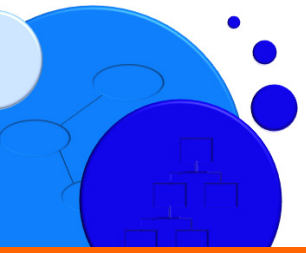

Major Features

Product and Tool Capabilities	
Supports full system lifecycle	Agile and phase processes
Process independent	Supports RM
Supports managing functions and components	Supports test management
Manage Cost and System Breakdown Structures	Supports feature-driven development (FDD)
Supports project V&V	Load source documents (text, tables, figures and links)
Manage source document versions and differences	Full lifecycle transitive traceability and coverage
User-defined items and attributes	User-defined link types, link rules and link attributes
Fully linked model hierarchies with model sharing and reuse	Full modeling and checking tools, inter-model checks
Spell checking	Quality (conformance) checks
Direct editing in tables and in user-defined forms	1:1, 1:N, M:N linking of all items
Drag-and-drop linking	Graphical traceability views
User-defined queries, views, forms, hierarchies, navigations	Make child, sibling, hierarchy
Split and merge items	Reordering of item hierarchies
Suspect item displays	User-defined metrics
Automated change histories	User-defined calculations
User-defined progress graphs	User-defined pivot tables
User-defined matrices	Automated WBS and progress reporting
User-defined dashboards and KPIs	User-defined reports to CSV, Word, HTML, Excel
User-defined Start Page UIs	User-defined commands in table views
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Cradle-7
From concept to creation...

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Cradle-SE Pro

Product Highlights

- Applies to agile and phase projects
- Application lifecycle management
- Requirements management
- Modeling / MBSE
- Full lifecycle integration
- V&V
- Reporting
- Document publishing
- Metrics
- Dashboards
- Project plans
- Compliance management
- Single user

Model Based Systems Engineering Across the Systems Lifecycle

Complete Application Lifecycle Management (ALM), Model Based Systems Engineering (MBSE) and documentation solution for the entire project lifecycle, fully user-definable and applicable to all agile and phase-based processes

Cradle-SE Pro is a complete solution to manage, trace and document all the data for your agile and phase-based projects.

You can capture information from external documents and tools, and track changes. You can build new sets of requirements, analysis, architecture and design models, tests or verifications, and link them to the source data and to each other. You can check the consistency and quality of this information, and prove the integrity of the models and other data with bi-directional coverage and traceability analyses.

You can raise customers' confidence with proof that your work satisfies its sources and constraints, and will meet their needs.

You can easily track progress with metrics and KPIs and link to your WBS and actual progress to your project planning tools.

You can create any number of databases, each with a schema and multiple projects that contain any number of items of any number of user-defined item types. Each item has any number of attributes with up to 1 TByte of data, held in Cradle, or referenced in files, URLs or other tools.

All items can be linked with user-defined types of cross reference. The links have attributes to justify, explain or parametize them. Links are direct and indirect, for lifecycle traceability, impact and coverage analyses.

External documents can be loaded into hierarchies of items. Every item in Cradle is linked to its source in a document. Changes in new document versions are automatically found and the database updated. You can prove the integrity of your source data to customers with a range of detailed coverage analyses of their documents.

Items can be linear, hierarchical and in many-to-many relationships. Items can be split, merged and reordered. All information can be shared and reused. Cradle can support product ranges, models, variants and builds, and compare them in tables, pivot tables and matrices.

- Supports the full systems development lifecycle at system, subsystem and lower levels
- Integrates in one product features normally spread across separate tools from different vendors
- Completely user-definable and user-extensible with point-and-click UIs
- Manage any information, including requirements, models, risks, interfaces, tests and verifications
- Scalable to millions of items of information
- Full traceability of data to source and generated documents with complete version management
- Full traceability and coverage analyses
- User-definable views of data including tables, trees, documents, matrices, diagrams and graphs
- User-defined metrics and management dashboards

Create any number of analysis, logical, process, architecture or design models in UML, SASD, IDEF, ADARTS, SysML and other notations. Optionally group models in hierarchies and link all elements of all models to requirements, SBS,

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issues, test cases and all other information.

Cradle tracks all edits to every requirement, test case, verification and all other information that you want it to hold. Edits can be reversed selectively or by group. Full or partial change logs are readily available.

You define how information is viewed and reported in any number of views, shown as nested tables, trees, matrices, pivot tables, and as diagrams.

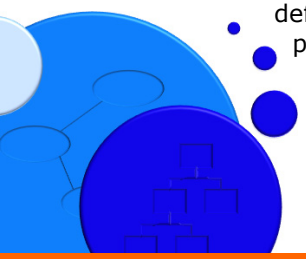
Generate versions of documents such as a URD, SRD, IRS, SDS and SSDS to match your or your client's formats with user-defined templates and detailed traceability of which items were published in each document issue.

You can manage your projects with:

- Metrics, user-defined calculations of items' values
- Key Performance Indicators (KPIs) results of metric calculations with color-coded display bands
- Bi-directional links to Project, including user task lists and actual progress reporting

Cradle is open. It supports many import/export formats, has several interface mechanisms to link to other tools, and connects to the Microsoft Office® components Word, Excel, PowerPoint, Visio and Project.

Cradle is simple to customize and use. You do not need to learn a scripting language or become a programmer to tailor it to your process. After every change to your schema, Cradle will automatically update collections of queries, views and other definitions that make you productive immediately.



Major Features

Product and Tool Capabilities	
Supports full system lifecycle	Agile and phase processes
Process independent	Supports RM
Supports managing functions and components	Supports test management
Manage Cost and System Breakdown Structures	Supports feature-driven development (FDD)
Supports project V&V	Load source documents (text, tables, figures and links)
Manage source document versions and differences	Full lifecycle transitive traceability and coverage
User-defined items and attributes	User-defined link types, link rules and link attributes
Fully linked model hierarchies with model sharing and reuse	Full modeling and checking tools, inter-model checks
Spell checking	Quality (conformance) checks
Direct editing in tables and in user-defined forms	1:1, 1:N, M:N linking of all items
Drag-and-drop linking	Graphical traceability views
User-defined queries, views, forms, hierarchies, navigations	Make child, sibling, hierarchy
Split and merge items	Reordering of item hierarchies
Traceability to/from document versions	User-defined document templates
Suspect item displays	User-defined metrics
Automated change histories	User-defined calculations
User-defined progress graphs	User-defined pivot tables
User-defined matrices	Automated WBS and progress reporting
User-defined dashboards and KPIs	User-defined reports to CSV, Word, HTML, Excel
User-defined Start Page UIs	User-defined commands in table views
Import/export for XML (any schema), CSV, Cradle	Automated batch reporting from command line utilities

Supported Platforms

Component	Details
Windows	7 SP1, 8.1, 10 (32/64-bit) Server 2008 R2 SP1 (32/64-bit) Server 2012 (64-bit) Server 2012 R2 (64-bit) Server 2016 (64-bit)
Linux	Any 32/64-bit with a kernel ≥ 2.6.32
PDF Viewer	Acrobat/Reader 9 or later
Web Browser	IE, Firefox, Chrome, Edge: latest available
Microsoft Office	2007 SP3 (32-bit) 2010 SP2 (32/64-bit) 2013 SP1 (32/64-bit) 2016 (32/64-bit)
Other Office	OpenOffice ≥ 4, LibreOffice ≥ 5

Characteristics

Characteristic		Details
Users		Single
Modules Included		PDM REQ MET DASH SYS DOC
Project databases		Unlimited
Items / database		Unlimited
Links / database		Unlimited
Limits	Per database	≤ 25 item types ≤ 50 categories
	Per item	≤ 25 frames

Cradle-SE Pro is part of the Cradle product range. The full, multi-user, product is Cradle Enterprise.

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Cradle Enterprise

Product Highlights

- Applies to agile and phase projects
- Application lifecycle management
- Requirements management
- Modeling / MBSE
- Full lifecycle integration
- V&V / compliance management
- Reporting
- Document publishing
- Metrics
- Dashboards
- Project plans
- User-defined UIs
- Custom web UIs
- Configuration management
- Multi-user

Collaborative Model Based Systems Engineering Across the Systems Lifecycle

Complete Application Lifecycle Management (ALM), Model Based Systems Engineering (MBSE) and documentation solution for the entire project lifecycle, fully user-definable and applicable to all agile and phase-based processes

Cradle Enterprise is a complete multi-user solution to manage, trace and document all data in your agile and phase-based projects.

You can capture information from external documents and tools, and track changes. You can build new sets of requirements, analysis, architecture and design models, tests or verifications, and link them to the source data and to each other. You can check the consistency and quality of this information, and prove the integrity of the models and other data with bi-directional coverage and traceability analyses.

You can raise customers' confidence with proof that your work satisfies its sources and constraints, and will meet their needs.

You can easily track progress with metrics and KPIs and link to your WBS and actual progress to your project planning tools.

You can create any number of databases, each with a schema and multiple projects that contain any number of items of any number of user-defined item types. Each item has any number of attributes with up to 1 TByte of data, held in Cradle, or referenced in files, URLs or other tools.

All items can be linked with user-defined types of cross reference. The links have attributes to justify, explain or parametize them. Links are direct and indirect, for lifecycle traceability, impact and coverage analyses.

External documents can be loaded into hierarchies of items. Every item in Cradle is linked to its source in a document. Changes in new document versions are automatically found and the database updated. You can prove the integrity of all source data to customers with a range of detailed coverage analyses of their documents.

Items can be linear, hierarchical and in many-to-many relationships. Items can be split, merged and reordered. All information can be shared and reused. Cradle can support product ranges, models, variants and builds, and show comparisons between them as tables, pivot tables & matrices.

- Supports the full systems development lifecycle at system, subsystem and lower levels
- Integrates in one product features normally spread across separate tools from different vendors
- Completely user-definable and user-extensible with point-and-click UIs
- Manage any information, including requirements, models, risks, interfaces, tests and verifications
- Scalable to millions of items of information
- Full traceability of data to source and generated documents with complete version management
- Full traceability and coverage analyses
- User-definable views of data including tables, trees, documents, matrices, diagrams and graphs
- User-defined metrics and management dashboards

Create any number of analysis, logical, process, architecture or design models in UML, SASD, IDEF, ADARTS, SysML and other notations. Optionally group models in

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hierarchies and link elements of all models to needs, requirements, SBS, issues, test cases and all other information.

Cradle tracks all edits to each requirement, test case, verification and all other information that you want it to hold. Edits can be reversed selectively or by group. Full or partial change logs are readily available.

Control the work with team hierarchies, roles and access controls. Review items with discussions, user-defined workflows and built-in CM with baselines, full version control and formal change management.

You define how information is viewed and reported in any number of views, shown as nested tables, trees, matrices, pivot tables, and as diagrams.

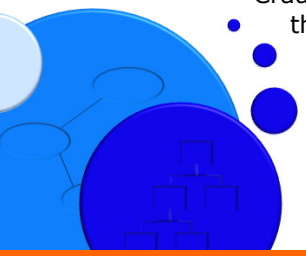
Generate versions of documents such as a URD, SRD, IRS, SDS and SSDS to match your or your client's formats with user-defined templates and detailed traceability of which items were published in each document issue.

You can manage your projects with:

- Metrics, user-defined calculations of items' values
- Key Performance Indicators (KPIs) results of metric calculations with color-coded display bands
- Bi-directional links to Project, including user task lists and actual progress reporting

Cradle is open. It has many import/export formats, has several interface mechanisms to link to other tools, and connects to the Microsoft Office® tools Word, Excel, PowerPoint, Visio and Project.

Cradle is simple to customize and use through point-and-click UIs.



Major Features

Product and Tool Capabilities	
Supports full system lifecycle	Agile and phase processes
Process independent	Supports RM
User-defined CM, baselines and workflows	Custom web UIs
Alerts with e-mail delivery	Publish database to websites
Collaboration and discussions	Performance analysis
User-defined team hierarchies and access controls	Code generation and reverse engineering
Supports managing functions and components	Supports test management
Supports project V&V	Load source documents (text, tables, figures and links)
Manage source document versions and differences	Full lifecycle transitive traceability and coverage
User-defined items and attributes	User-defined link types, link rules and link attributes
Fully linked model hierarchies with model sharing and reuse	Full modeling and checking tools, inter-model checks
Spell checking	Quality (conformance) checks
Direct editing in tables and in user-defined forms	1:1, 1:N, M:N linking of all items
Drag-and-drop linking	Graphical traceability views
User-defined queries, views, forms, hierarchies, navigations	Make child, sibling, hierarchy
Split and merge items	Reordering of item hierarchies
Traceability to/from document versions	User-defined document templates
Suspect item displays	User-defined metrics
Automated change histories	User-defined calculations
User-defined progress graphs	User-defined pivot tables
User-defined matrices	Automated WBS and progress reporting
User-defined dashboards and KPIs	User-defined reports to CSV, Word, HTML, Excel
Import/export for XML (any schema), CSV, Cradle	Automated batch reporting from command line utilities

Supported Platforms

Component	Details
Windows	7 SP1, 8.1, 10 (32/64-bit) Server 2008 R2 SP1 (32/64-bit) Server 2012 (64-bit) Server 2012 R2 (64-bit) Server 2016 (64-bit)
Linux	Any 32/64-bit with a kernel ≥ 2.6.32
PDF Viewer	Acrobat/Reader 9 or later
Web Browser	IE, Firefox, Chrome, Edge: latest available
Microsoft Office	2007 SP3 (32-bit) 2010 SP2 (32/64-bit) 2013 SP1 (32/64-bit) 2016 (32/64-bit)
Other Office	OpenOffice ≥ 4, LibreOffice ≥ 5

Characteristics

Characteristic	Details
Users	Up to 8,192
Modules Included	User-defined, all modules available
Database limit	None

Cradle Enterprise is part of the Cradle product range that includes low cost, single-user tools.

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Cradle Subscriptions

Subscription Highlights

- Applies to agile and phase projects
- Application lifecycle management
- Requirements management
- Modeling / MBSE / SysML / UML
- Full lifecycle integration
- V&V
- Reporting and document publishing
- Rapid deployment
- No software installation
- No in-house IT costs or delays
- Service is fully managed by 3SL
- On-boarding and off-boarding assistance
- Reduced cost, a business expense

Integrated Systems Engineering Delivered as SaaS

Manage all information for the entire lifecycle with full traceability, metrics, quality checks and performance indicators, all linked to your project schedules

Cradle is a complete multi-user solution to manage, trace and document all data in your agile and phase-based projects.

You can capture information from external documents and tools, and track changes. You can build new sets of requirements, analysis, architecture and design models, tests or verifications, and link them to the source data and to each other. You can check the consistency and quality of this information, and prove the integrity of the models and other data with bi-directional coverage and traceability analyses.

3SL offers a choice of Cradle Enterprise systems delivered as SaaS (software as a service) from a choice of servers, in a range of fixed term subscriptions, each accessed by your choice of concurrent users.

The Cradle service provides Cradle directly to your users from a remote environment managed by 3SL:

- In a matter of days from order
- With no software installations
- Needing no, or little, work from your IT

The Cradle service:

- Is a self-contained set of Cradle and third party software tools
- Is integrated with your filesystems and printers
- Is secure and resilient
- Needs no administration by your organization
- If you wish, is linked to your corporate e-mail
- If you wish, is run on servers exclusive to you

The Cradle service delivers the latest version of Cradle, and related applications, directly to users' desktops. Cradle and the other tools appear in windows like any other application that a user runs locally. But Cradle, and your databases, all run on remote servers inside the Cradle service.

You can have any number of databases. They, and the data inside them, are private to you. 3SL will manage the service so you can be assured that it is always available.

- Choose from a range of Cradle Enterprise systems to provide the capabilities that you need
- Choose a shared or dedicated host environment
- Specify the number of users that you need to have access to the environment
- Specify how long you want the service for
- Work in any number of databases
- Upload and download data and results easily from your local IT systems
- Print directly to your local devices if needed
- On-boarding service to help you to start
- Off-boarding service to preserve your work before your subscription ends
- Add extra terms and change who can access the service at any time

You can choose a lower-cost shared service or a dedicated service. Using the shared service, you share servers at 3SL in the UK with other subscribers, keeping privacy of your data and databases. In a dedicated service,

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3SL will create a virtual private cloud (VPC) of servers using a third party hosting provider that are exclusive to you and are located in any geographic area that you choose.

Service Access Control

You specify who is to access the service and the locations from where access is allowed. All access by users from these locations is by web browser over HTTPS secured using 3SL's certificate as a sub-domain of threesl.com. The HTTPS connection is the service's only link.

Applications Provided

- Latest version of Cradle (see table)
- MS Office 2016: Word, Excel® and PowerPoint®, also Project, Visio® by request
- Adobe Acrobat Reader®
- Mozilla Firefox® (no Internet link)
- Text editing utilities

Data Integrity

Automated backups of all databases with a 4 hour RTO (recovery time objective) and an 8 hour RPO (recovery point objective). Backups are held for 8 months.

Cradle System Types Available as Subscriptions

Characteristics and Features	Cradle Enterprise-RM Basic	Cradle Enterprise-RM Pro	Cradle Enterprise-SE Basic	Cradle Enterprise-SE Pro
Unlimited databases, items/database, user-defined schemas	✓	✓	✓	✓
User-defined data types / link to external data and tools	✓	✓	✓	✓
User-defined item calculations	✓	✓	✓	✓
Load from external documents / import and export	✓	✓	✓	✓
User-defined queries, views, forms, matrices, pivot tables, graphs, metrics, KPIs and dashboards	✓	✓	✓	✓
User-defined process-oriented UI, customized by user / team	✓	✓	✓	✓
Graphical traceability views / many-to-many & cross-lifecycle transitive links / lifecycle-wide traceability and coverage	✓	✓	✓	✓
Create requirements, issues, verifications, test cases …	✓	✓	✓	✓
Quality check and spell check information	✓	✓	✓	✓
Create models (MBSE) / link models to all other information / consistency check models			✓ 1 notation group	✓ all notation groups
User-defined reports	✓	✓	✓	✓
User-defined documents (Word)		✓		✓
Track database items to formal project documents	✓	✓	✓	✓
Bidirectional links to plans/schedules	✓	✓	✓	✓
CM system (reviews, baselines, formal change control…)	✓	✓	✓	✓
Change histories with options to reverse edits	✓	✓	✓	✓
User and team setup with user-defined access controls	✓	✓	✓	✓
External tool integration support	✓	✓	✓	✓
Multi-lingual databases and UI (cy, de, en, fr, ko, nl, ru, zh)	✓	✓	✓	✓
Messaging and email / collaboration (discussions, comments)				

Technical Support

Full Cradle maintenance services will be provided throughout your subscription, including unlimited technical support.

Active Service Management

3SL will actively manage the service and respond to requests and instructions from the lead users that you have nominated.

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