



MCESA

Maricopa County Education Service Agency

MCESA REILize Decision Support System Business Requirements Specification (BRD)

MCESA Marketing Site integration to RDSS

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Version No: 1.0



Program: MCESA REILize Decision Support System
Module: MCESA Marketing Site integration to RDSS
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1 Document Information

1.1 Version History

VERSION HISTORY			
ID	Date	Revised By	Reason for change
0.1	4/27/2012	Bilal Chaudhry	Initial creation and ongoing definition prior to first business review.
1.0	5/2/2012	Bilal Chaudhry	Updated diagrams and updated requirements.
1.0	5/4/2012	Rich Schnettler	Made corrections and changes after reviewing the 1.0 Draft version of the BRD with Al Dullum – the new version will be 1.0 Baseline.
1.0	5/7/2012	Rich Schnettler	Included feedback from Kristine Morris in the 1.0 Baseline Final version of this document.

1.2 References

REFERENCES		
Supporting Documentation Title	Purpose	Document
Schoolwires Layout Technical Documentation	Technical documentation for MCESA Schoolwires.	MCESA_REIL_ADE_SchoolWiresLayouts_V1.4.PDF

1.3 Stakeholders

STAKEHOLDERS			
Organization	Stakeholder Name	Title	Email Contact
MCESA	Dr. Don Covey	County Superintendent of Schools	Don.Covey@mcesa.maricopa.gov
MCESA	Kristine Morris	Chief Deputy Superintendent	Kristine.Morris@mcesa.maricopa.gov
MCESA	Dr. Lori Renfro	Asst Supt, Performance-Based Management Systems	Lori.Renfro@mcesa.maricopa.gov
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MCESA	Laurie King	Director of Innovative Practices	Laurie.King@mcesa.maricopa.gov
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ADE	Pamela Smith	Executive Director of Strategic IT Programs, Arizona Department of Education	Pamela.Smith@AZed.gov
ADE	Jolene Newton	Project Manager, Arizona Department of Education	Jolene.Newton@AZed.gov





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1.4 Document Approvals

This document has been approved as the official Business Requirements Document (BRD) for the MCESA REILize- MCESA Marketing Site integration to RDSS project by the business stakeholders.

Following approval of this document, changes will be governed by the project’s change management process, including impact analysis, appropriate reviews and approvals, under the general control of the Master Project Plan and according to the Arizona Department of Education Project Management Office policy.

DOCUMENT APPROVALS			
Approver Name	Project Role	Signature/Electronic Approval	Date
Kristine Morris	Business Partner Stakeholder / Advisor		
Jolene Newton	Program Director and Primary Stakeholder Liaison		
Pamela Smith	Executive Director of Strategic IT Programs and Stakeholder Liaison		





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2 Introduction

The Maricopa County Education Service Agency (MCESA) has undertaken a five-year initiative aimed at improving student academic progress by increasing the effectiveness of teachers and principals. Six local school districts are engaged in the Rewarding Excellence in Instruction and Leadership (REIL) initiative, which is funded by a Teacher Incentive Fund grant from the U.S. Department of Education.

The REIL initiative, at this phase of the project, is comprised of the following modules: Data Management formerly known as Student-Teacher Link, Observation Tool, Professional Development formerly known as Curriculum Resources, Assessment System, Educator Goal Plan, Video Bank and Administration & Reporting.

- Data Management consists of Course Mapping, Human Resources, Incentive Reporting for Teachers, Verification Tool, and exchange of data.
- Professional Development consists of Online Modules, Face-to-Face Sessions, Online Development Sessions with Registration, Scheduling, progress monitoring and reporting.
- Assessment System includes Authoring, Test Set Up, Administration, Scoring, and Reporting/Analysis.
- Educator Goal Plan module includes Scheduling & Calendar, Evaluation of Results & Approvals, Teacher Support Plans, and Goal Plan Templates.
- Administration & Reporting consists of Dashboards, the REIL score which is comprised of the Observation and Value-Added Scores, Data Analysis, Role-Based Management, Verification of Rosters & Scores, and RDSS setup.

The integration of the MCESA Marketing site to the RDSS will provide the Education Professional the ability to log into RDSS from any web page. It will also allow MCESA personnel to access and manage its content.

3 Purpose and Scope

3.1 Purpose

The purpose of this document is to describe business requirements of an application completely, accurately and unambiguously in a technology-independent manner. All attempts have been made in using mostly business terminology and business language while describing the requirements in this document. Very minimal and commonly understood technical terminology is used.

This document will require review and approval sign-offs in order to complete this phase of the project and proceed to the next phase of the project.

The document contains the following sections: Introduction, Purpose and Scope, Description of the Project, Business Requirements, Non-functional Requirements, Glossary of Terms, Document Information and if necessary, an Appendix.

The Business Requirements that have been collected and defined in this document as a result of a series of meetings and follow-up interviews with MCESA business owners and stakeholders in late April and early May. The purpose of the project is to allow continued access to MCESA marketing information including video and an access point that allows credentialed users to navigate to a login function in order to reach the RDSS.

Business owners and stakeholders from MCESA and ADE officials have specified business and key features for the delivery of the MCESA Marketing Site integration to RDSS. This document should contain enough detail from which the IT Business Analysts and Development Staff can derive and develop detailed functional requirements and use cases in the next phase of the project. The next phase of the project includes these two key deliverables, the Functional Specification and Use Case Documents.





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The checkmarked option below indicates the type of requirements and overall purpose of this documentation:

- Business requirements for major enhancements to an existing application
- Business requirements for new application
- Business requirements for replacement application development
- Business requirements for a request for information (RFI)
- Business requirements for a request for proposals (RFP)

3.2 Scope of Work

The scope of this document is to define and prioritize each business requirement that the new MCESA Marketing Site integration to RDSS needs to encompass. Each business requirement should be stated in clear, concise language and covering one discrete thought or idea. Each requirement should be numbered and associated with a corresponding user Story or expected experience in interacting with the MCESA Marketing Site integration to RDSS, as well as articulating any exceptions and rules.

3.2.1 Out of Scope

- Resetting passwords and adding users are out of scope. It will be managed by EduAccess. See <https://www.azed.gov/eduaccessmanager/passwordresetrequest.aspx>.



4 Description of the Project

4.1 Description

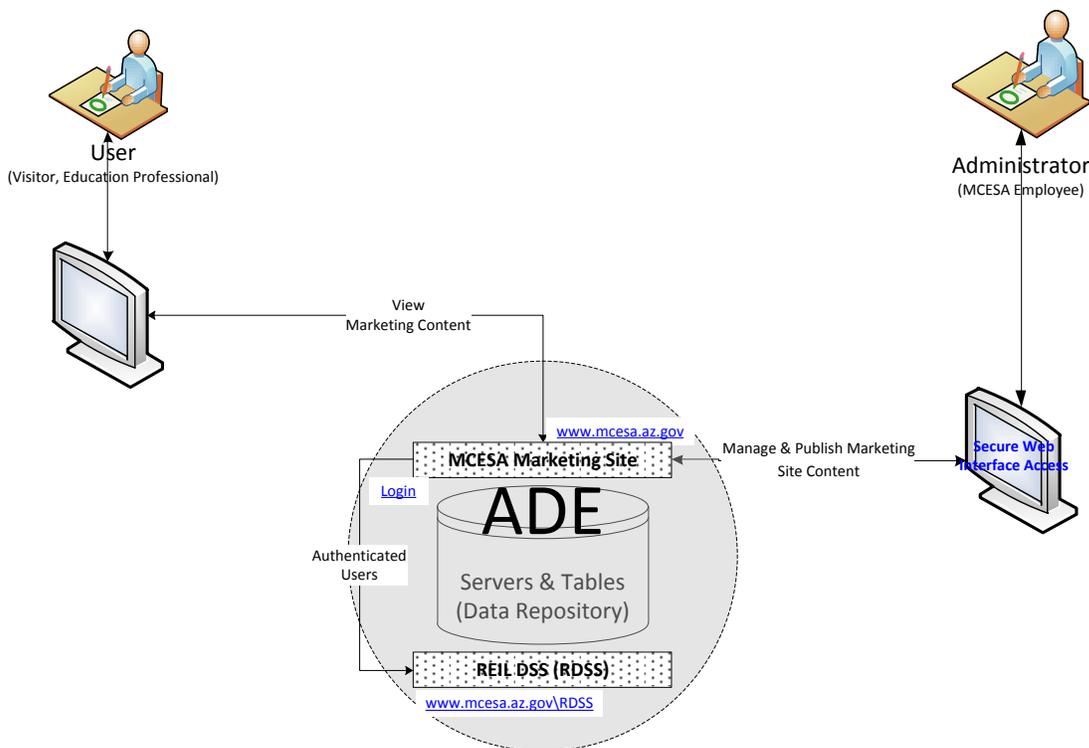
The major goals and objectives of the MCESA Marketing Site integration to RDSS are to provide the following key features and functions:

- Provide ability for a User visiting the MCESA Marketing site with a link to a login function in order to access the RDSS.
- Provide ability for MCESA personnel to make updates to content published to the MCESA Marketing site.

4.2 Rationale

The benefits of this project are to allow MCESA to make updates to their public marketing site without requiring ADE IT Development resources, and to allow a link from this page to a login function in order to validate credentials and allow access to RDSS.

4.3 Environment



4.4 User Characteristics

The following table describes the Users identified, a description of the anticipated interactions and/or permissions, the skill level and their expected role. Skill level for each User is ranked high for requiring a significant amount of knowledge and skill to interact with the functionality; medium for a mid-level knowledge, to low, for a relatively small amount of knowledge and skill. The reason for the skill level rating is to aid in the planning and definition of a system training program as well as define a help system to adequately cover all of the Users that will potentially interact with the system.

User(s)	Description	Skill Level	Role(s)
			Administrator
MCESA Personnel	<ul style="list-style-type: none"> Should have the ability to make changes to the MCESA Marketing site and immediately push changes to Production environment. 	High	Content Administrator
			Authenticated User
School Personnel: <ul style="list-style-type: none"> Principal Assistant Principal Teacher 	<ul style="list-style-type: none"> Should have the ability to access the login function and be authenticated by the system. Should have access to features, functions, and data in RDSS that is appropriate to their roles/permissions and position within the organization. 	High	Education Professional, Education Administrator, Super User
			Visitor
Anyone accessing the MCESA RDSS Marketing Site	<ul style="list-style-type: none"> Should have read-only access to any published public content on the site. Should have read-only access to any marketing collateral. 	Low	Visitor

4.5 General Constraints

ID	Constraint
4.5.1	None identified at this time.

4.6 Assumptions and Dependencies

4.6.1 Assumptions

ID	Assumption	Implications
4.6.1.1	System shall be able to support addition of new modules in the RDSS whether they are developed in house or if they are purchased.	Otherwise, the integration of the MCESA Site to RDSS will not be able to expand beyond the implementation of the TODCT within RDSS (e.g. PD).
4.6.1.2	All servers will be hosted at ADE.	ADE is responsible for maintaining the physical servers, otherwise an alternative arrangement will need to be made for housing the servers.
4.6.1.3	Authorized MCESA User has the ability to update the Marketing site.	User can make changes to the MCESA Marketing Site without requiring additional access and support tools from ADE. The tools and the training in their use will be provided by SchoolWires.
4.6.1.4	The Level IV switch at ADE hosting the sites will be able to connect to EduAccess and display and retain the mcesa.gov.az URL in the site path once the User has logged in successfully to the RDSS.	Once user has logged into RDSS they will see a mcesa.az.gov URL in the site path.

4.6.2 Dependencies

ID	Dependency
4.6.2.1	None identified at this time.

4.7 Project Risks

ID	Project Risk	Implications	Severity	Status
4.7.1	Possible 48 hour outage during cutover to ADE servers	While DNS Servers are propagating new IP addresses through each Level throughout the world, it may take up to 48 hours for users to reconnect to the marketing site running on ADE servers.	High	Open
4.7.2	May not be able to maintain mcesa.az.gov domain while user is logged into RDSS	The Level IV switch at ADE hosting the sites might not be able to connect to EduAccess and display/retain the mcesa.gov.az URL in the site path once the User has logged in successfully to the RDSS. Users may not see mcesa.az.gov path in URL while logged into RDSS and the web page may not display (e.g. mcesa.az.gov/RDSS).	High	Open
4.7.3	May not be possible to get servers at ADE deployed and configured by May 16 th in time to meet the implementation deadline as per the Maricopa Project Plan May2012.	The rollout of the MCESA RDSS Marketing site could be delayed.	High	Open

5 Business Requirements

The priority definitions used in the business requirements are listed below.

Priority	Description
Critical	This level requirement meets MCESA REIL grant criteria and must be included in the initial release of the project.
High	This level requirement meets criteria to be vetted with business owners and stakeholders before inclusion in the initial release of the project.
Medium	This level requirement is considered a "nice to have" item that has been vetted with customer for possible inclusion within a future release of the project.
Low	This level requirement meets criteria to be excluded from initial release of project, but should be tracked as a potential enhancement to be vetted with business owners and stakeholders for possible inclusion with a future release of the project.

5.1 Login to RDSS

BR-01	
Priority:	Critical
Release:	Initial
User Story:	As an Education Professional (e.g. Principal or Teacher) I want to be able access a login function from the MCESA marketing information site a in order to access the TODCT, PODCT or other modules within the RDSS.
Application:	MCESA Marketing Website
Description:	The system shall provide the capability for a User to login from the MCESA marketing information site, entering user name and password, be authenticated, and access the RDSS modules that have been deployed. Note: Only TODCT is currently available in production.
Exceptions:	None identified at this time.
Rules:	The following business rules apply to this requirement:
5.1.1	The global navigation feature (e.g. link or button) should be available on each page in the header area of the domain known as MCESA.AZ.GOV that should allow access to a login function where a user name and password must be entered.
5.1.2	The system should perform a validation of the login credentials (i.e. user name and masked password) and only allow a User with a valid combination to access the RDSS landing page.
5.1.3	The RDSS should either open a new tab or browser window and should not display on the same page as the MCESA marketing information site page.

6 NON-FUNCTIONAL REQUIREMENTS

6.1 Availability

ID	Requirement
6.1.1	The system needs to be accessible 24x7x365, except for scheduled periodic maintenance. The schedule should be published and clearly communicated to all system Users in advance. A Service Level Agreement (SLA) should be drafted in support of the overall system and not just the Professional Development module

6.2 Backup and Restore

ID	Requirement
6.2.1	The application server and the associated data should have backup and restore capabilities that are part of the ADE Information Technology Department's approved server backup plan.
6.2.2	In the event of a catastrophic failure, the application should be fully functional within 24 hours.
6.2.3	Business expectations for restoration capabilities are that backup and restore processes will be tested for viability once a quarter, beginning with Q3 2012.

6.3 Capacity

The current capacity that the system needs should be based in part on the following estimated for the initial release. The future capacity is the projected or estimated requirements. **Note: it is not possible to estimate the number of visitors that may access the MCESA RDSS Marketing Site since it is “open” access to “public content” and anyone who has navigated to the URL. The estimates below are only for those Education Administrators and Professionals that may actually need to login in order to access the TODCT feature in the RDSS.**

6.3.1 Current

ID	Requirement																								
6.3.1.1	<p>Number of Logged In Users. This is the number of people expected to need login credentials for the REIL schools, the district offices, and MCESA office in order to access the REILize Decision Support System.</p> <p>The estimate is based upon the information pulled directly from the REIL grant. Users included in the tabulation are certified superintendents, principals, other administrators; certified teachers and other certified personnel; classified managers, supervisors and directors. Additionally, the MCESA office is expected to need login credentials for less than one hundred employees. Note: Classified teacher aids and other personnel are not included in this estimate.</p> <table border="1"> <thead> <tr> <th>Staff Type</th> <th>REIL Totals</th> </tr> </thead> <tbody> <tr> <td>Certified --</td> <td></td> </tr> <tr> <td>Superintendent, Principals, Other Administrators</td> <td>139</td> </tr> <tr> <td>Teachers</td> <td>2425</td> </tr> <tr> <td>Other</td> <td>261</td> </tr> <tr> <td>Subtotal</td> <td>2825</td> </tr> <tr> <td>Classified --</td> <td>0</td> </tr> <tr> <td>Managers, Supervisors, Directors</td> <td>43</td> </tr> <tr> <td>Teachers Aids</td> <td>367</td> </tr> <tr> <td>Other</td> <td>1429</td> </tr> <tr> <td>Subtotal</td> <td>1839</td> </tr> <tr> <td>GRAND TOTALS</td> <td>2868</td> </tr> </tbody> </table>	Staff Type	REIL Totals	Certified --		Superintendent, Principals, Other Administrators	139	Teachers	2425	Other	261	Subtotal	2825	Classified --	0	Managers, Supervisors, Directors	43	Teachers Aids	367	Other	1429	Subtotal	1839	GRAND TOTALS	2868
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6.3.2 Forecast

ID	Requirement																								
6.3.2.1	<p>Number of Logged In Users. This is the number of people expected to need login credentials for the REIL Alliance schools, the district offices, and MCESA office in order to access the REILize Decision Support System.</p> <table border="1"> <thead> <tr> <th>Staff Type</th> <th>REIL Alliance Totals</th> </tr> </thead> <tbody> <tr> <td>Certified --</td> <td></td> </tr> <tr> <td>Superintendent, Principals, Other Administrators</td> <td>95</td> </tr> <tr> <td>Teachers</td> <td>1361</td> </tr> <tr> <td>Other</td> <td>913</td> </tr> <tr> <td>Subtotal</td> <td>2369</td> </tr> <tr> <td>Classified --</td> <td></td> </tr> <tr> <td>Managers, Supervisors, Directors</td> <td>71</td> </tr> <tr> <td>Teachers Aids</td> <td>460</td> </tr> <tr> <td>Other</td> <td>763</td> </tr> <tr> <td>Subtotal</td> <td>1294</td> </tr> <tr> <td>GRAND TOTALS</td> <td>2440</td> </tr> </tbody> </table> <p>Note: At the statewide level, there are 225 School Districts, 374 charter holders and 13 Joint Technological Education Districts.</p> <ul style="list-style-type: none"> • Over 2,200 public schools • Over 60,000 certified teachers • Over 1,000,000 students 	Staff Type	REIL Alliance Totals	Certified --		Superintendent, Principals, Other Administrators	95	Teachers	1361	Other	913	Subtotal	2369	Classified --		Managers, Supervisors, Directors	71	Teachers Aids	460	Other	763	Subtotal	1294	GRAND TOTALS	2440
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	GRAND TOTALS	2440																							

6.4 Resource Constraints

ID	Requirement
6.4.1	At the time of this writing, ADE has not finalized their standard SLA from which to base the service needs of the MCESA REILize Decision Support System.

6.5 Response Time

ID	Requirement
6.5.1	Search response should be at \pm 10 seconds.
6.5.2	Page refresh should be at \pm 10 seconds.

6.6 Scalability

6.6.1 User Scalability

ID	Requirement
6.6.1.1	The number of concurrent users is expected to grow from 250 for the initial release to 5,500 concurrent users (statewide) in the next five years.
6.6.1.2	The total number of users is expected to grow from 2,500 to 55,000 users (statewide) in the next five years.

6.6.2 Application Scalability

ID	Requirement
6.6.2.1	The Professional Development module is expected to be capable of full integration with the identified modules comprising the MCESA REILize Decision Support System (RDSS) product. The “look and feel” of each module should have continuity with the Professional Development.
6.6.2.2	The overall RDSS product is expected to have a ‘wrapper’ as the front-end design that will complement the yet-to-be designed MCESA web site currently under discussion with a third party vendor.

6.6.3 Data Scalability

ID	Requirement
6.6.3.1	The MCESA database must be able to accommodate storage of a rolling ten (10) years of data without sacrificing processing and refresh times. If a yet-to-be-determined portion of this data will be archived, it must remain readily available to RDSS users via the archive management processes.

6.7 Security

6.7.1 Authorization and Access Controls

There are two types of users: a visitor who either has login credentials or does not. Visitors that have valid login credentials may choose to login with their user name and password, and if successfully authenticated, pass through to the RDSS. Authenticated Education Administrators and Education Professionals may access the RDSS and TODCT, while authenticated Content Administrators will have access to edit and post new marketing content including videos.

Note: Please refer to the User Characteristics section for more details.

6.8 Stability

ID	Requirement
6.8.1	The system should be designed such that time-out events and other unexpected system errors are non-occurring or minimally occurring events. If and when these system events occur then the system should record and report it to the IT Development & Support team.

6.9 Minimum User System Capabilities

ID	Requirement
6.9.1	The system should be designed such that it includes the best practices recommendations of a User Centric Design Team to ensure consistency, ease of navigation and intuitiveness.

7 Glossary of Terms

Definitions of terms, acronyms, and abbreviations used in this document for MCESA Marketing Site integration to RDSS are listed below.

Terms	Acronyms	Definitions
ADE		Arizona Department of Education
Administrator Roles		A User may have one or more administrator roles assigned to them. Their permissions should be the sum total of the roles to which they are assigned when they login to the system. They should also have access to reports relating to any related area.
Teacher Learning Observation Instrument	TODCT	Composed of 6 rubrics, this document is the basis for the teacher evaluation and scoring.
MCESA		Maricopa County Education Service Agency
MCESA Employee		A person employed by the Maricopa County Educational Service Agency.
Observation Data Capture Tool	ODCT	Observation Data Capture Tool – part of the MCESA REILize Decision Support System suite of tools that enable entry and retention of performance measurement scores and opportunities for professional growth.
Teacher		Educators instructing students in the schools within each district. Teachers are the Evaluatees of the Learning Observation Instrument (versus the Leading Observation Instrument). Some teachers may also perform as evaluators of their peers in a subsequent release of the ODCT.
Visitor		Any person who is visiting the RDSS site and has not logged in.

APPENDIX A. Supporting Documentation

This section of the document provides supporting documentation and other visuals that will assist the reader in their comprehension of the business requirements.

A1. Network Diagram

This section describes the proposed network solution as envisioned by Al Dullum.

