



# Oracle Service Cloud Knowledge Foundation Implementation Guide for Knowledge Centered Support

ORACLE WHITE PAPER | AUGUST 2015



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## Introduction

The Consortium for Service Innovation has published a set of practices for implementing Knowledge Centered Support (KCS) and they have created a software verification process to validate that software is capable of implementing KCS. Oracle Service Cloud Knowledge Foundation has been KCS verified for KCS v4 for many years and has just recently become verified for KCS v5. This guide describes how to implement KCS v5 in Oracle Service Cloud Knowledge Foundation.

Each section of this implementation guide corresponds to a KCS principal that requires extra configuration in the Oracle Service Cloud product. For more information on the KCS practice itself, please refer to the KCS Practices Guide ([http://library.serviceinnovation.org/KCS\\_Practices\\_Guide](http://library.serviceinnovation.org/KCS_Practices_Guide)). For easy reference, most sections of this guide also describe the specific practice and technique in the KCS practices guide.

## Capture in the Moment: Proposing Answers

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*"Rather than being documented after the fact, KCS articles are created as part of the problem-solving process..."*

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*Practice 1: Capture – Technique 1: Capture Knowledge in the Moment it Becomes Explicit*

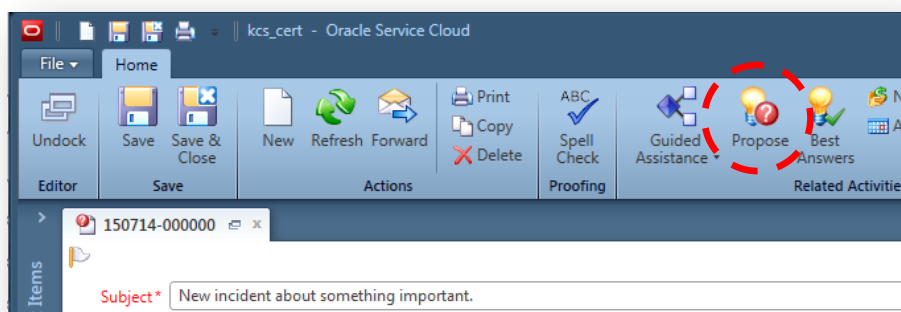
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Creating a knowledge base article at the same time as investigating a support incident allows the support agent to document their progress so other agents can bootstrap troubleshooting similar incidents even if the first incident hasn't been resolved.

The propose answer feature in Oracle Service Cloud Knowledge Foundation automatically creates a new answer based on the incident's content. Once the new answer has been proposed, it can be edited to remove customer-specific data. As the support agent continues to investigate the original incident, they should continue to update the new answer.

Instructions for proposing answers:

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/css\\_user\\_incidents.048.35.html](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/css_user_incidents.048.35.html)



1. Propose Button in the Answer Workspace

In figure 2, we can see how each of the KCS content format sections (Problem/Question, Resolution, Environment, and Notes/Cause) can be included in the proposed answer. Text in the Question, Answer, and Notes are imported from the incident and can be edited in the propose dialog before creating the answer.

Propose Incident for Answer

General Products and/or Categories Files

The following answer fields are populated with incident data. Please review and make edits to this proposed answer.

Proposed Answer

**Summary\*** New incident about something important.

**Question** I have a question about something important. There are lots of details. I'll leave the rest as an home exercise.

**Answer**

**Problem/Question:**  
the situation in the customer's words—what are they trying to do or what is not working?

**Resolution:**  
the answer to the question or the steps required to resolve the issue.

**Notes**

**Environment:**  
what products does the user have (platform, products, releases)? How is it configured? Has anything in the environment changed recently?

**Notes/cause:**  
the underlying source of the issue. (optional, typically only valuable for problems or defects)

OK Cancel

2. Propose Answer Dialog

## Capture Customer's Context: Incident Workspace Custom Report

*"Context is as important as content!"*

*Practice 1: Capture – Technique 2: Capture the Customer's Context*

One of the most fundamental KCS practices is capturing knowledge in the context of the problem. Capturing the context of the problem improves findability and helps the customer related to the knowledge article.

Oracle Service Cloud collects customer clickstream data when they search and view content in the knowledge base. Support agents can use that information to better understand the context of the customer's inquiry. For example, in figure 3 below, we see that the customer searched for "ir beacon" and then viewed answer 15. Apparently that answer didn't resolve their concern, so they submitted an incident. They also submitted a second incident, perhaps for an unrelated question. As you might expect, clickstream data is stored in the clickstream table in the database and can be accessed with a custom report.

Messages	Contacts	Details	Time Billed (0)	Tasks (0)	Organization	Web Visit (8)	Attach
		When	Spent	Page			
1		Referring Site: No Value					
2		Source IP: OS/Browser: 148.87.67.198: Windows 7 / Chrome					
3		01/29/2014 12:37:56	0h 0m 0s	Support Home			
4		01/29/2014 12:38:05	0h 0m 9s	Support Home			
5		01/29/2014 12:38:12	0h 0m 7s	Answers Search [Text: ir beacon]			
6		01/29/2014 12:38:18	0h 0m 6s	<a href="#">View Answer 15: IR Beacon</a>			
7		01/29/2014 12:39:15	0h 0m 57s	Ask a Question			
8		01/29/2014 12:39:16	0h 0m 1s	Question Submitted			
9		01/29/2014 12:46:32	0h 7m 16s	Ask a Question			
10		01/29/2014 12:46:33	0h 0m 1s	Question Submitted			
11		Total	0h 8m 37s				

3. Web Session Log

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## KCS Article Structure: Standard Text

*"A little bit of structure helps readability."*

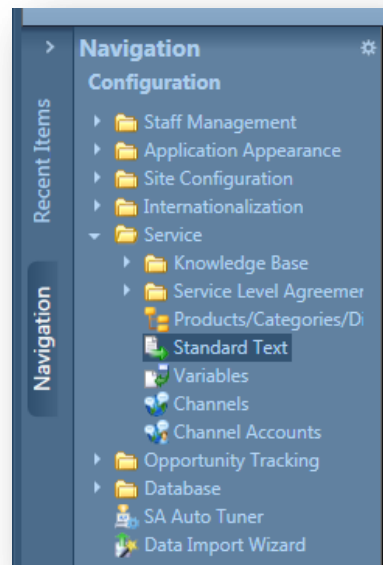
### *Practice 2: Structure – Technique 1: Utilize Simple Templates*

The KCS structure improves readability by clearly identifying important parts of the answer. For example, a customer might initially be interested in the Resolution section and then the Cause section. However the customer will probably search with terms more similar to those in the Issue section. All sections are important, but relevant at different times.

Using Oracle Service Cloud's standard text feature, we can create a standardized template that agents can insert into incidents before proposing them as answers.

Instructions for creating standard text:

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/css\\_admin\\_content\\_library.050.2.html#](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/css_admin_content_library.050.2.html#)



4. Standard Text in the Navigation Menu

A screenshot of the 'Standard Text - Edit' interface. The interface has a left sidebar with a 'KCS template' item. The main area contains the following fields:

- \*Name**: A text box containing 'KCS template'.
- Hotkey**: A text box containing 'kcs'.
- \*Type**: Two checkboxes, 'Rule Text' and 'Incident Text', both of which are checked.
- \*Value**: A section with a radio button for 'Text' (selected) and a button for 'HTML'. Below this is a large text area containing the template text:

Problem/Question:  
the situation in the customer's words—what are they trying to do or what is not working?

Environment:  
what products does the user have (platform, products, releases)?  
How is it configured? Has anything in the environment changed recently?
- Interface Visibility**: A table with columns 'Interface', 'Language', and 'Visibility'. The first row is 'kcs\_cert', 'English (US)', and 'Select All' (checked).

5. Standard Text Editor

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## Flag It or Fix It: Answer Feedback

*"Flag It – if we are not licensed or confident, we should add comments to the article..."*

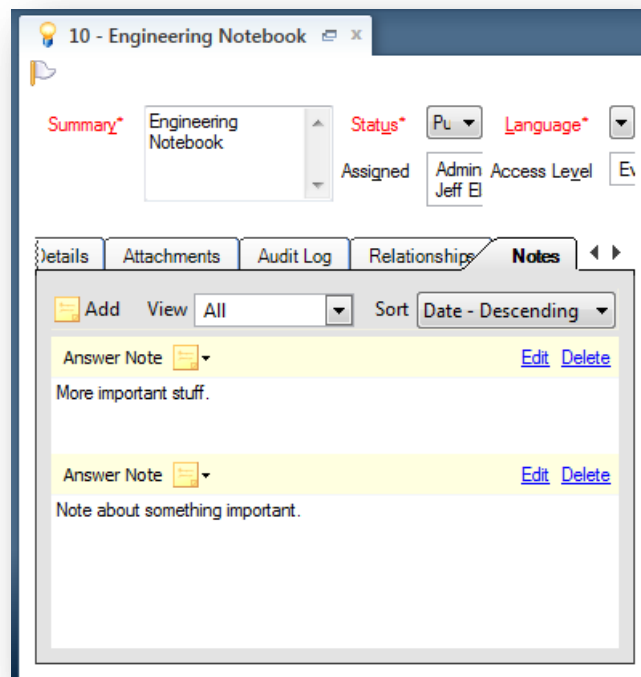
*Fix it – modify an existing KCS article if we are licensed and confident."*

*Practice 4: Improve – Technique 2: Flag It or Fix It*

Once a knowledge base answer has been created, it's important to continue to review and update answers. Feedback for answers can come from internal sources like support agents or external sources, namely customers. Of course if the support agent is licensed and confident in the new information, they should make changes to the answer directly.

### Internal Feedback

If the support agent isn't licensed or confident in the new information, they can add internal feedback in answer notes. After adding a note, changing the status to Review can trigger an answer rule to notify the answer's author that a review is required.



6. Answer Notes in the Answer Workspace

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## Customer Feedback

Customer feedback can be left on an answer when viewing it from customer portal. Adding answer feedback to the answer details page in CP is documented well in the standard product documentation:

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=answer\\_details.066.22.html#](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=answer_details.066.22.html#)

**Support Center**

[Home](#) | [Email Us](#) | [Call Us](#)

[Back to Answer](#)

Your rating has been submitted, please tell us how we can make this answer more useful.

Email Address \*

Feedback \*

**BasicFormInput**

**BasicFormSubmit**

[Log In](#) | [Sign Up](#)

[Desktop](#) | [Mobile](#) | [Basic](#)

7. Answer Feedback in Customer Portal

## Feedback Incident Workflows

When a customer submits feedback from customer portal, a new feedback incident is created with the customers comments. It's important to create incident rules to route those feedback incidents to support agents that are licensed to update the respective answer. If you neglect creating the incident rule for feedback incidents, the customer feedback will go without response, creating the (correct) impression that no one is following up on their comments.

The answers below have instructions for creating incident feedback rules.

[https://cx.rightnow.com/app/answers/detail/a\\_id/638](https://cx.rightnow.com/app/answers/detail/a_id/638)

[https://cx.rightnow.com/app/answers/detail/a\\_id/1730](https://cx.rightnow.com/app/answers/detail/a_id/1730)

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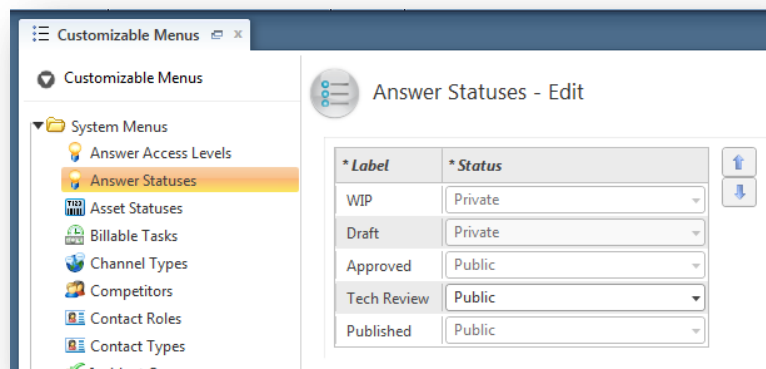
## KCS Article Life Cycle: Answer Statuses

*"Article states...help us manage visibility of articles so the right people are seeing the right things."*

### Practice 5: Content Health – Technique 2: KCS Article Life Cycle

To represent KCS article states, Oracle Service Cloud uses Answer Statuses. Each status represents identifies the answer's status as well as provides some access control. Listed below are the eight statuses suggested by KCS and the likely status type. Private status type means that the answer is only available to internal agents using agent desktop. Public status type means that the answer will be visible on the end user pages and the agent desktop. Depending on the business needs, some statuses can be public or private. For example, Technical Review could be public so that the answer is still available while it's being reviewed. Or it could be made private so that answers under review won't be available again until they are approved.

Status Name	Status Type (Private/Public)
Work in Progress (WIP)	Private
Draft	Private
Approved	Private
Published	Public
Technical Review	Public or Private
Compliance Review	Public or Private
Rework	Private
Archive	Private



8. Answer Statuses Editor

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## KCS Roles: Profiles and Answer Workspaces

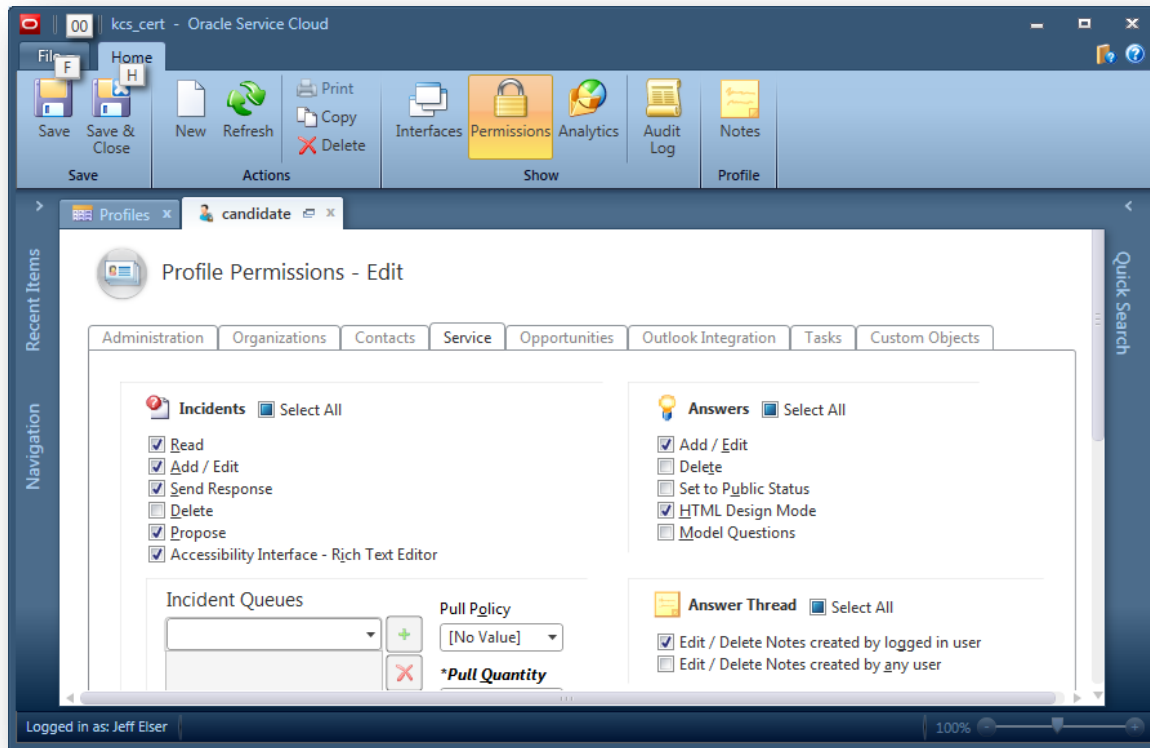
*"The roles help redefine the way knowledge is created, valued, and shared."*

*Practice 7: Performance Assessment – Technique 1: KCS Roles and the Licensing Model*

KCS specifies five distinct roles: Candidate, Contributor, Publisher, Coach, and Knowledge Domain Expert. Oracle Service Cloud leverages profile permissions and custom answer workspaces to manage the capabilities of each role. There is more than one way to properly set up profiles and workspaces to do KCS, but we will describe one possible approach. Below is a table of the KCS roles along with their descriptions from the KCS practices guide, OSvC profile permissions, and answer workspace properties.

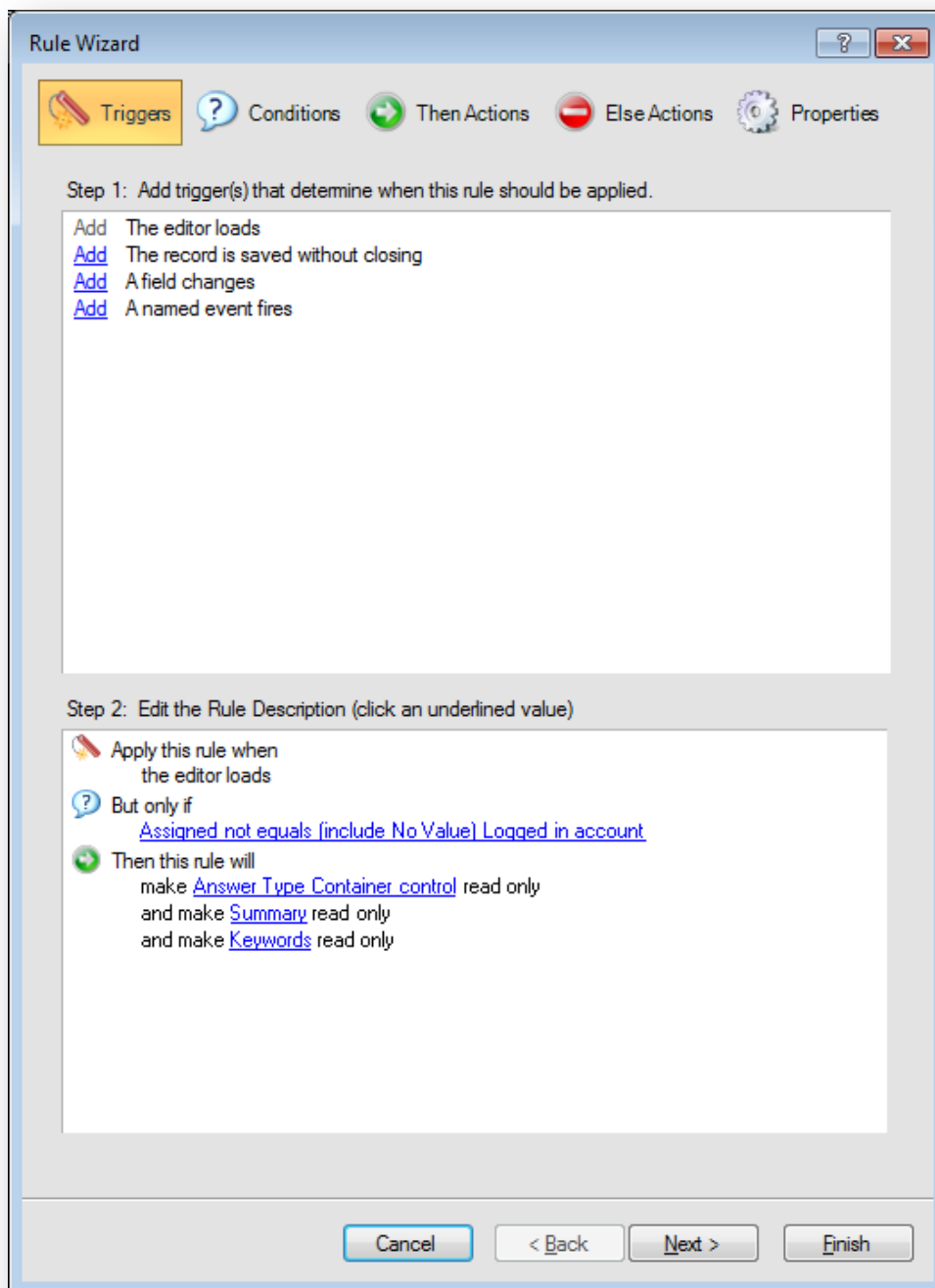
Role	Description	Permissions	Workspace Properties
<b>Candidate</b>	Searches KB, captures knowledge in the incident.	Add/edit answers. Cannot set to public status.	Workspace rules disables edit unless the answer is assigned to the logged-in agent.
<b>Contributor</b>	Creates, modifies, and reviews articles; publishes answers to internal audiences.	All answer permissions except Set to Public Status.	Standard answer workspace.
<b>Publisher</b>	Publish to external audiences.	All answer permissions.	Standard answer workspace.
<b>Coach</b>	KCS practices expert	All answer permissions.	Standard answer works plus an AQI custom field and/or AQI proxy survey.
<b>Knowledge Domain Expert</b>	Focuses on Evolve Loop processes.	All answer permissions. Access to the Information Gaps report.	Standard answer workspace.

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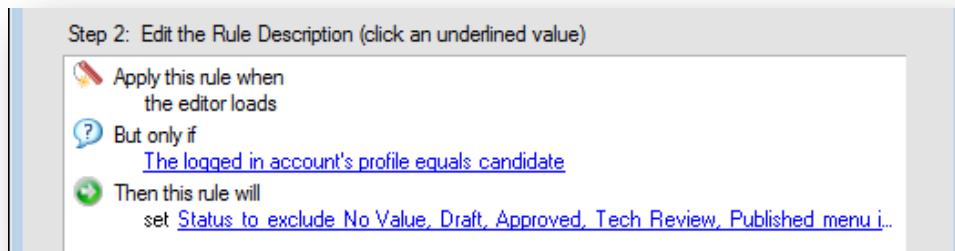


#### 9. Candidate Profile Permissions

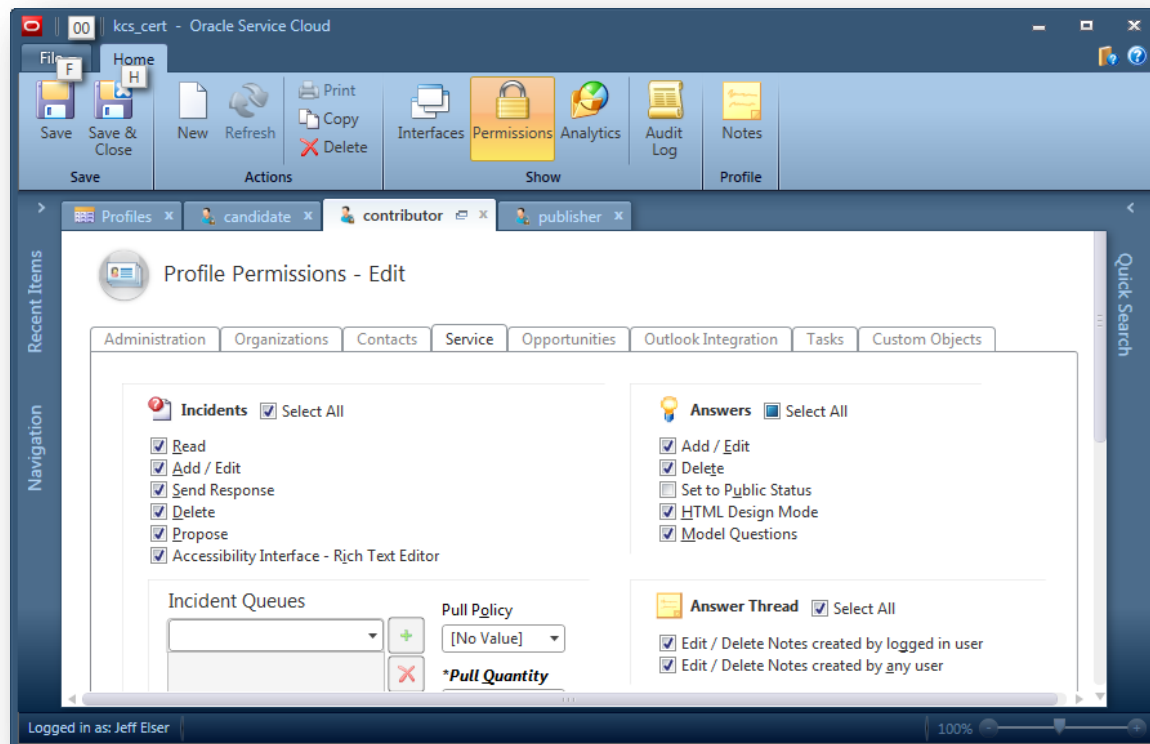
The KCS practices guide states that the KCS Candidate can only create WIP and can only edit their own answers. Figure 10 shows a sample workspace rule that makes some answer workspace rules read-only if it's not assigned to the logged-in user. To be complete, the workspace rules may need to restrict more fields than is shown in Figure 10. Figure 11 shows a sample workspace rule that restricts the assigned menu so that the KCS Candidate can only use the WIP status.



10. Sample Candidate Workspace Rules: Make Answer Read-only



11. Sample Candidate Workspace Rules: Restrict Answer Status Menu



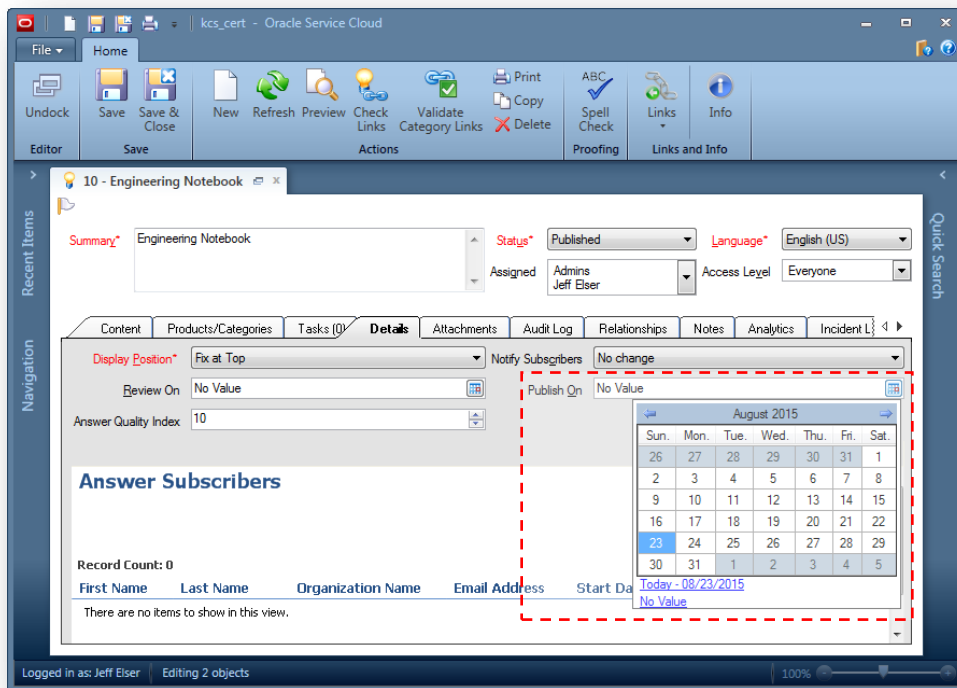
12. Contributor Profile Permissions

## Automatically Publish: Answer Rules and Publish On Field

*“Our goal is to get most of what we know into the self-service model as quickly as we can.”*

### Practice 5: Content Health – Technique 7: Self-service Success

Oracle Service Cloud has two ways to automatically publish answers: publish on answer workspace field and answer rules. The easiest is to use the Publish On field as shown in Figure 13. Of course this assumes you know in advanced what date the answer should be published.



13. Publish On Answer Workspace Field

It's also possible to use answer rules to automatically set the answer status to public based on a variety of answer field triggers. For more information about answer rules, please see the documentation linked below.

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=crm\\_admin\\_business\\_rules\\_management.011.01.html#](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=crm_admin_business_rules_management.011.01.html#)

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## Performance Assessment: Analytics

*"An integrated view of measures includes:*

- Trends in activities and attainment of goals in outcomes*
- Qualitative and quantitative*
- Team and individual"*

### *Practice 7: Performance Assessment – Technique 3: The Balanced Scorecard*

Below you will find a discussion about how to accomplish the reporting requirements for KCS. Clearly describing how to design a report can be tricky, so sample report definitions will be uploaded to the OSvC community (<http://communities.rightnow.com/>).

#### Value Triangulation

KCS practices identify two types of performance metrics: leading indicators (activities) and lagging indicators (outcomes). Additionally, article quality is treated as a special case because it's more descriptive than event-based. These three types of information together create a triangulation and provide a holistic view of the value created.

#### Leading Indicators

Leading indicators measure activities that can lead to changes in outcome measures. For example, adding appropriate answer links in incidents is an activity that can improve the quality of resolution and customer satisfaction. However, adding too many or irrelevant answer links will lead to lower quality resolution and lower customer satisfaction.

So the important point with measuring activities is to avoid creating goals against activities and instead measuring the trend of the activities. Below is a table of some suggested leading indicators and their location in the OSvC database. This information will allow you to create custom reports showing the data that is important to your specific situation.

Leading Indicator	Database Tables	Notes
Participation Rate	user_trans, accounts	user_trans.data_tbl = Incidents  user_trans.type = Edit, Answer Link Append, Answer Text Append, Answer View from Incident
Answer Creation	transactions, answers	answers.a_id = transactions.id AND transactions.tbl = 9
Answer Reuse	answers, accounts, user_trans	answers.a_id = user_trans.ref_id AND (user_trans.type = 4 OR user_trans.type = 5 OR user_trans.type = 6)
Answer Modification	transactions, answers	answers.a_id = transactions.id AND transactions.tbl = 9
Answer States	answers, ans_statuses, transactions	transactions.id = answers.a_id AND transactions.tbl = 9  ans_statuses.status_id = transactions.id1 AND transactions.trans_type = 6 AND transactions.tbl = 9

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## Desired Outcomes

Desired outcomes are measures that can't be influenced directly, but serve as an indicator of end result of action. For example, customer satisfaction (CSAT) can't be directly influenced, but by accurately and quickly resolving an incident, you can cause the CSAT to go up. Common outcome metrics include CSAT, employee satisfaction, and net promoter score.

Collecting data for these measures often requires performing surveys. Oracle Service Cloud's survey module can be used for this task. Please see the link to documentation below for more information on performing surveys.

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=fb\\_surveys.089.01.html#](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=fb_surveys.089.01.html#)

## Article Quality Index

The Article Quality Index (AQI) is a 0-10 point metric that qualifies how well an answer was written. There are a number of ways to collect AQI data. For example, by using proxy surveys, you can create a survey and include it in a custom tab in the answer workspace for coaches. To learn more about proxy surveys, please see the documentation below.

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=fb\\_surveys.089.10.html](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=fb_surveys.089.10.html)

However the AQI score is collected, eventually the score should be stored on an answer custom field. Please see the documentation below for information on creating custom fields.

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=crm\\_admin\\_custom\\_fields.012.2.html#1184885](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=crm_admin_custom_fields.012.2.html#1184885)

Once the AQI is stored in an answer custom field, it can be used in custom reports (i.e. answers.c\$aqi).

## Radar Charts

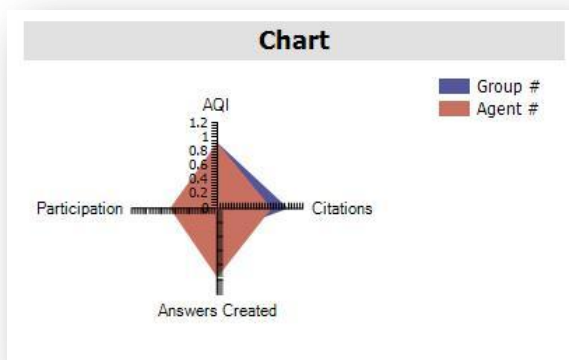
Radar charts allow the user to quickly visualize value creation and identify strengths and weaknesses relative to both their past performance and their team's performance. Radar charts show a number of normalized metrics plotted for an agent and the agent's team's averages.

In figure 14 below, the sample radar chart shows four metrics: AQI, participation, citations, and answers created. Both the individual agent and the team average are displayed. This allows us to understand where the agent is proficient and deficient compared to their peers.

14. Sample Radar Chart

Please see the documentation linked below for more information on creating charts in reports.

[https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=crm\\_analytics\\_custom\\_reports.041.079.html#](https://documentation.custhelp.com/euf/assets/docs/may2015/olh/wwhelp/wwhimpl/js/html/wwhelp.htm#href=crm_analytics_custom_reports.041.079.html#)



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## Exit Statement

We hope this guide has helped your implementation of KCS with Oracle Service Cloud. For more information on any of the topics we've discussed, please refer to the resources below.

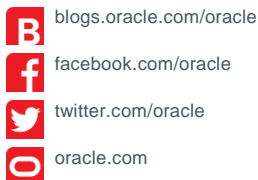
- Documentation: [https://cx.rightnow.com/app/answers/detail/a\\_id/5168](https://cx.rightnow.com/app/answers/detail/a_id/5168)
- Knowledge base: <https://cx.rightnow.com>
- Communities: <http://communities.rightnow.com/>
- Consortium for Service Innovation: <http://www.serviceinnovation.org>



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### CONNECT WITH US



### Integrated Cloud Applications & Platform Services

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Oracle Service Cloud Knowledge Foundation Guide for Knowledge Centered Support  
August 2015  
Author: Jeff Elser



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