

CDS METRICS COLLECTION

Community Data Systems award recipients are required to provide monthly metrics on the data and services provided by their projects. These metrics are reported using the Metrics Collection Tool (MCT), developed originally by the Global Land Cover Facility at the University of Maryland. This tool is being maintained and operated at the Goddard Space Flight Center as it has been since 2008. For projects whose products or services are distributed in whole or in part by a Distributed Active Archive Center (DAAC) that is already reporting metrics to the ESDIS Metrics System (EMS), a mechanism called the EMS-MCT Bridge is available to transfer certain values between the systems. This document gives an overview of these tools, as well as information on metrics collection in general. Individual help is also available at esdscds@lists.nasa.gov.

The metrics to be collected are defined with examples in the Metrics Baseline Document which is available on the Community Data System Programs page of the earthdata web site, at <http://earthdata.nasa.gov/cds>. On the upper left under Community Data Systems Programs, click on "Metrics Baseline Report November 2011" to bring up the PowerPoint file that is the metrics baseline document.

You will see in that document that while some metrics are defined in detail, there are others that are quite flexible. In fact, you will be able to define up to four metrics of your own that you feel best capture the work of your project. Contact Greg Hunolt (GregHunolt@excel.net) to answer any questions you have on the metrics, how they may be interpreted for your project, how you can use the project-defined metrics, etc.

Metrics reports are due by the 15th of the month following the month the report covers. For example, the report on March activity would be due on April 15. On or about April 7, you will receive a "gentle reminder" that March metrics are due by April 15th, and a second reminder on or about April 22 if you are late with your report.

For MEaSUREs projects, generally, an initial report is required at 3 months from the start for the project to indicate in metrics 8, 9, and 10 the science, applications, or education areas you expect your project to support, and a comment (to metric 1) indicating when data distribution to users will begin. Until you begin distribution, you need only enter reports that update this information if it changes.

For ACCESS projects, in your initial report you would use the comment to metric 1 to indicate when you expect to begin providing services, new capabilities (e.g. in the form of software packages) or other products, as well as the science, applications, or education areas you expect your project to support (in metrics 8, 9, and 10). Until you begin providing services, you need only enter reports that update this information if it changes.

Monthly reporting of metrics is expected after data distribution starts. This needs to be done manually on the MCT website as described below as long as the distribution is from the MEaSUREs PI's website. However, once the MEaSUREs products have been delivered to the DAAC for distribution, the metrics reports will track distribution using the DAAC's instance of the EMS. In some cases this will also be true for ACCESS projects, for example if a product to which an ACCESS service has been applied is so indicated in the EMS.

An automated process, the EMS-MCT Bridge, can be set up to capture the dynamic metrics (metrics 1, 2, 3, and 5: distinct user counts, users by domain class, products delivered counts, and volume delivered) from the DAAC's EMS system and put them into MCT metrics database. The other metrics have to be entered manually using the MCT, but most of them seldom change and are carried forward automatically. Thus you may find you only need to use the MCT to enter the initial values. This is discussed further below.

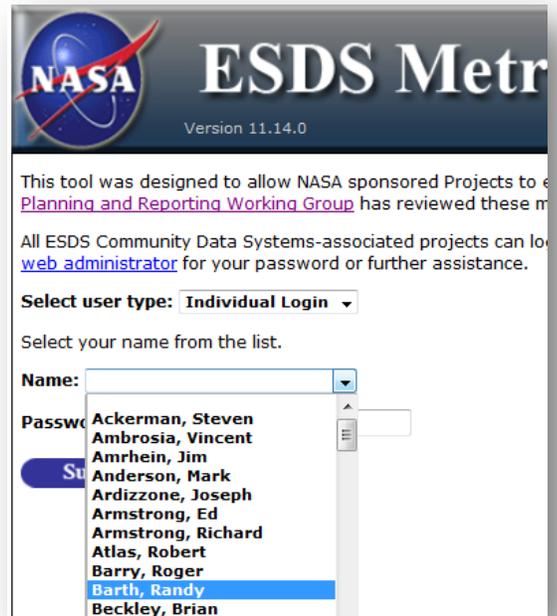
USING THE MCT

Before one can use the MCT, an account request must be made. If you have an account in the NASA Enterprise Directory (NED), you must request the account through IdMax as for other NASA applications. Simply go to <http://idmax.nasa.gov>, select Access Management / Request or Modify Application Account and search for the MCT application. Non-NED users can send an email to

esdscds@lists.nasa.gov requesting the account. In either case, include the contract or PI's name so the account can be set up properly.

To access the MCT, select it from the menu on the Community Data Systems web site, <http://earthdata.nasa.gov/cds>. This is the same site used to access the ESDS e-Books for progress/accomplishment reporting. You can also go there directly at <http://earthdata.nasa.gov/mct>. It is currently possible to log in directly to a particular project, but that will probably be disabled soon. Instead log in as an individual user. The current interface lets you select your name from a drop down list and then enter a password that you will have received when the account was created. At some point this will be replaced with a standard IdMax Launchpad login. Then select your project.

Once inside the MCT, you will find a welcome page that lists primary information about your project. There is also a color-coded status bar. If you have trouble distinguishing colors, you can hit Ctrl-a and words will be added.



Reporting Status

	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012
MEaSURES Test User						

Note: if you have problems distinguishing colors, hit Ctrl-A.

Legend: Report Due Report Not Required EMS Data Imported Report Submitted

Introduction

Mission Statement: The mission of this activity is to measure the success of Projects in meeting stated goals and objectives, to show the role and contribution of Projects to NASA programs, and to enable an overall assessment of the success of programs and their contribution to NASA goals.

You will select Performance Metrics Tool > Enter/Edit Metrics Report to enter your values. Choose the month for which you wish to enter data. If you are staying up-to-date better than this test user, it will be the prior month which is at the top of the list.

Metrics Entry Period

Please select the month these data are for: 11/2012
10/2012
09/2012

[Values in brackets were previously reported for 03/2012.]

Attach Metrics
If you would like to paste your records, rather than filling out the form, please [click here](#).

Metric	Prev Year	03/2012	11/2012	Comments for 11/2012	Standing Comments
1. Distinct Users Please enter the count of individuals who, by any means, request and receive or in some other way use products, services and/or other information during the reporting period.		[567]	<input type="text"/>		big baseline comments

The MCT will retrieve the values from the last month you entered, which was 3/2012 for this test user. These values are shown for your comparison, as well as a sparkline graph for the last 12 months. The first time you enter data, neither of these will be shown. Enter the values for the report, along with any comments unique to this month. New values will update the sparkline and turn it green. You can also enter “standing” comments which will be carried forward automatically from month to month. Certain questions (specifically 4, 6, 8-10, 12, and possibly 100-103 depending on how you define them) often go unchanged for many months; these will also be carried forward from the most recent previous month. You can update these values as needed. Values do not have to be strictly numeric: you could enter “about 10” in a field. Of course, that will be treated as a zero in the spark charts and limits reporting summaries. A better approach would be to put 10 as the value and then put “Approximation” in the monthly or standing comments. Questions 5 and 6 take units from a drop-down box. Question 7 has been retired and is missing on purpose. When you are done, click Save.

It is possible to provide a comma-separated value file with the values for the table. Use the “click here” in the screen above to access the following screen which gives full details about preparing CSV text for pasting into the page.

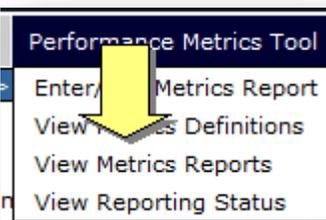
Performance Metrics Tool > Attach Metrics

Sample Template
You may use the following [template file](#) for reporting metrics. This is a comma-delimited text file which can be edited with text editors such as WordPad, Microsoft Word, etc. The file has been filled in with default values of 0 for the questions and “no comments” for the comments. However, this program will now accept partial files as well. That means you do not have to provide a line for every question, nor comments on every line.

If you have previously entered values for this month, they will be retained if you leave the value null here. If this is the first time you are entering data for this month, values for values for standing comments and most question answers will get carried over from the most recent previous period. Comments for the current month and the answers to questions 1-3, 5, 11, and 13-14 are never copied from earlier months reports since these values are expected to change with every report. If you are going to enter data for several months, doing so in chronological order will take advantage of that carryover. Questions need not be in order. Comments may be attached to subquestions (like 2.1, 2.2, etc.), but only the last one listed is kept. Identifiers for subquestions may be given as 2.1 or 2.01, but note that 2.10 and 2.20 must have the trailing zero. Questions 5 and 6 may include optional units: MB (default), GB, or TB.

Report Metrics for 11/2012
Please cut and paste your metrics in the text area. The text should be comma-delimited; if you wish to include a comma, surround the entry with double quotes. Enter two to four values per line: question number, answer, standing comment, and 11/2012 comment.

Clicking the preview button then populates the main form from these values. From there you can make further modifications before you actually save the values.



From the “Performance Metrics Tool” menu you can select “View Metrics Reports” to look at previously entered values for one or more months. Select the months in the obvious way and either click “On-Screen Report” or “Download for Excel.” The latter

produces a file with an .xls extension, but it is in fact a comma-separated file that Excel will read with only a warning about the suffix. The on-screen report is in a table form and normally includes columns shown below. However if only a single month is selected and there are data for previous months, the “period” column is dropped and a sparkline column is added.

Performance Metrics Tool > View Metrics Reports

 export to Excel

Barth: MEaSUREs Test User

Period	No.	Metric	Value	Comments for month	Standing Comments
01/2012	1	Distinct Users	333	New values for new portal this month.	Standing notes about how we count users.
01/2012	2.01	Non-US Domains:	1	Specifics about this month.	Notes on IP lookup.
01/2012	2.02	Unresolved domains:	2		
01/2012	2.03	nasa.gov:	3		
01/2012	2.04	usgs.gov:	4		
01/2012	2.05	noaa.gov:	5		

Most of the other menu items deal with obsolete or seldom-used functions which new users should not need. “Impact Metrics” in particular have been superseded by Accomplishment Quad Charts which are entered using the e-Books application.

USING THE EMS-MCT BRIDGE

To set up the Bridge, an appropriate “WHERE” clause has to be developed to count the proper records in EMS. Often projects have unique product names that they can provide, but occasionally a more complicated scheme is required. Work with Randy Barth (Randy.Barth@nasa.gov) and Donna Rahmani (Donna.Rahmani@nasa.gov) to set this up. Once established, the Bridge will transfer answers to questions 1, 2, 3, and 5 each month on the third or fourth of the month.

All of the other metrics, like product types available, science and/or applications areas supported, etc., are not tracked by the DAAC's EMS system, and have to be entered into the MCT manually. But these are basically static, unchanging, except for occasional updates (for example if you were to add a new product type), and they are automatically carried forward from month to month. So, once they have been entered in the initial report they don't need to be re-entered unless an update is needed. You will need to enter these metrics using the MCT. You would also need to enter any standing comments for all of the metrics, which also then would be carried forward from month to month.

Once the Bridge is working you would look at the reports in the MCT to see if the reported values look reasonable, and make any changes to the “static” metrics or standing comments that might be needed. You can also update the metrics entered by the Bridge in case you distribute data in some manner in addition to that distributed by the DAAC and reported to EMS. And if you have comments specific to that month's report, you can always enter them through the MCT.

Two special cases are worth noting. The number of services provided, question 11, is neither filled in nor carried forward. If you wish to report that, it must be done manually. However, many projects that provide services do so by delivering a product, so it may be sufficient to put in the standing comment that the value for question 11 should be considered to be the same as for question 3 and leave it blank. Citation metrics (13 and 14) are presumed to be dynamic and are not carried forward. Whenever you wish to enter these optional metrics, use the MCT. If you use project-defined metrics (100-103), these could be static or dynamic. These are automatically carried forward in case they are static, but you can modify them if you wish using the MCT.

If you enter values for a month before the Bridge does, be careful not to enter values for the questions the Bridge fills in (1, 2, 3, and 5). If it finds any of those non-blank, it will skip the update entirely, assuming you know better values.