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## Registering a New Metric

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A list of metrics from the standard package is available on [this page](#).

### Preparing the Metric File

Predicate supports working with metrics written in Python.

Metrics or tests are uploaded to the system from a file with the `.py` extension.

The basic version of the application uses the following versions of the language and packages:

 **Expand the list of packages** 

- Python** version 3.11
- pandas** version 2.2.0
- numpy** version 1.26.4
- plotly** version 5.20.0
- matplotlib** version no lower than 3.9.2
- scikit-learn** version no lower than 1.2.0
- statsmodels** version no lower than 0.13.5
- river** version no lower than 0.16.0

Using other versions of the language and packages and adding new packages is possible but requires additional configuration of the application. Please contact the system administrators for the necessary work.

For more details on writing metric code, see the page "[Rules for Writing Metrics](#)".

### Registering a Metric

To upload a new metric, navigate to *Control Panel > Catalog > Metrics* in the main menu of the application, and on the opened metrics and tests catalog page, click the "Add" button. Adding a metric is also available via *Control Panel > Create > Utilities > Metric*.

Name	Description	Tags	Created date
r_e_5_2_Binomial_test	Binomial Test	risk	2 days ago
r_e_6_1_Model_default_rate	Model Default Rate. Model and actual default rate by rating scale buckets	risk	2 days ago
r_e_5_3_Derivative_Score_Distribution	Derivative Score Distribution	risk	2 days ago
r_e_5_2_Unique_clients	Unique Clients by Bins. Histograms of the distribution by rating scale ranks	risk	2 days ago
r_e_5_1_HHI	Herfindahl-Hirschman Index (HHI) and barchart with distribution of observations by groups for the selected categorical variable	scalar +1	2 days ago
r_e_4_7_relv_PR_Curve	Precision-Recall Curve charts train/test and relative difference in PRC-AUC	risk	2 days ago
r_e_4_6_Lift_dynamic	Lift Index Dynamic	risk	2 days ago
r_e_4_5_PSI_model	PSI Model. Population stability index (PSI) for model predications	scalar +1	2 days ago
r_e_4_4_Gini_dynamic_model	Model Gini index values (%) by periods	scalar +1	2 days ago
r_e_4_3_Gini_diff_features	Relative value of Gini difference for features (%) on train/test	risk	2 days ago
r_e_4_2_Gini_relv_diff_model	Relative value of Gini difference for the model (%) on train/test	scalar +1	2 days ago
r_e_4_1_Gini_diff_model	Absolute value of Gini difference for the model (%) on train/test	scalar +1	2 days ago
r_e_3_3_Spearman_Correlation	Spearman Correlations. Matrix of pairwise Spearman rank correlations and maximum correlation value (%)	scalar +1	2 days ago
r_e_3_1_Monotony_field	Monotony Field	risk	2 days ago
r_e_2_9_MW_test	Mann-Whitney Test (left-sided) p-value (%)	scalar +1	2 days ago
r_e_2_8_HL_test	Hosmer-Lemeshow Test p-value (%)	scalar +1	2 days ago

A form for uploading a new metric will open:

In the opened form, you need to upload the Python file with the metric code and click the "Create" button.

Once the metric is created, the corresponding entry will appear in the list of tests registered in the system (*Catalog > Metrics*), and the metric will become available for use in monitoring projects.