# Release notes v5.7.1

**Important!** Create a backup copy of your projects and connector repositories before updating to the new version. Projects saved in the new version can't be opened in versions earlier than **5.6**. Also, if your organization uses EasyMorph Server, please make sure that the Server is upgraded to the new version before Desktops.

### A few words from the creators of EasyMorph

This is a minor release with security improvements and cumulative bugfixes. Note that the changes can be breaking if your EasyMorph Server uses a self-signed SSL certificate or one of your data connectors connects to a server with a self-signed or expired SSL certificate. In this case, you will need to configure SSL exceptions settings also added in this release.

## What's new

### Whitelist of excepted SSL certificates

In this release, we've added global settings in Desktop and Server to allow self-signed or expired SSL certificates only if their thumbprints are white-listed in application preferences (Desktop) or settings (Server).

These settings affect **all data connectors** used by the respective application. We highly recommend configuring this option and, if necessary, explicitly permitting excepted SSL certificates by listing their thumbprints.

Note that when Desktop is linked to EasyMorph Server, its SSL exceptions are provided by the Server, not by application preferences in EasyMorph Desktop.

Also, the Server Link configuration in Desktop now always prohibits a self-signed or expired SSL certificate of EasyMorph Server, unless its thumbprint is explicitly permitted in the Server Link settings.

### Miscellaneous

- Tableau connectors that use PAT now can be used in parallel in workflows
- Desktops can now execute projects with invalid digital signature if they are connected to EasyMorph Server
- The "Find action" dialog now allows finding actions with any annotation

# Release notes v5.7

**Important!** Create a backup copy of your projects and connector repositories before updating to the new version. Projects saved in the new version can't be opened in versions earlier than **5.6**. Also, if your organization uses EasyMorph Server, please make sure that the Server is upgraded to the new version before Desktops.

### A few words from the creators of EasyMorph

With this release, we continue transforming (or, if you wish, *morphing*) EasyMorph into a multi-purpose automation platform that brings data processing and collaboration in your organization to a new level. Version 5.7 introduces Server *boards* – a new versatile feature that can be used in various ways:

- Unify in one view your important business information, no matter where it's stored
- Deliver workflow computation results (datasets, files) to employees in your organization
- Explore and analyze tabular data in your business applications and databases
- Collect and track business and technical metrics
- Build simple dashboards
- Trigger automation workflows

	lashboard that demonstrates a few r		a table with dummy data.						
KPIs									
	Orders (yesterday) 1 560	Si	25		EUR 1,0M				
Quick a	actions								
Ľ	Go to CRM		🤣 Webinar reg	istrations					
Table									
rank	oompany	Colu	Revenue per worker	olty	work	revenue	Industry	metro	
3691	Eco-Energy Global Biofuels		37,970,550	Franklin	109	4,138,790,000	Energy	Nashville	
	Bridger		33,217,831			3,487,872,233		Dallas	
	Pacific Union Real Estate		8,557,589	San Francisco		5,528,202,691		San Franck	
	G&A Partners		6,714,467				Human Resources	Houston	
	RKA Petroleum Companies		6,147,606			608,613,000		Detroit	
	4								
ा Experi	ary view								
C <sup>2</sup> Experi									
ा Experi	ary view	e2 e2	102 120 140 140	180 200 220	240 290	280 393	270 340 340 470	45 445	
C Expen	ary view earoary 9 20 40	87 99	100 120 740 740	ego 200 220	240 250	282 300	220 340 340 340 470	420 440	
Chart 1	ary view	eo eo	ಗಡ ಬಾ ್ಕಾಂ ಗಳ	182 203 229	240 250	280 350	20 340 340 340 470	430 440	
Chart 1	any view           Image: series and se	63 59	103 120 <sup>3</sup> 40 190	18C 200 220	240 280	280 300	320 340 340 430	40	
Chart 1	лту View п Заков в Роска в Закова фактика в Улиана фактика в Улиана фактика ф	80 87	100 120 ye ye	162 203 229	240 280	280 300	20 340 341 343 470	40	
Chart 1	III Y VIEW	53 33	10 12 10 10	482 203 2 <b>2</b> 0	240 280	280 393	200 540 543 490	420 440	
Chart 1	лту View п Заков в Роска в Закова фактика в Улиана фактика в Улиана фактика ф	65 52		fet 200 200	240 250	285 299	20 30 30 30 40	40 40	
Chart 1	Stry View     Senser	ę., s.,		112 222 229	240 250	295 272	10 Xe 30 Xi 40	40 40	
Chart 1	Inty View	65 B2	13 13 46 46	fet 20 229	240 250	283 355	10 10 10 10 10	425 440	
Chart 1	Inty View	ę5 53		44 25 25	240 280	262 550	30 34 90 NO 400	425 440	
Chart 1	Any View any Vi	5 53	12 13 14 14	42 23 23	280 280	20 50	10 36 M N 40	40 40	

Screenshot 1: A board in EasyMorph.

In the next major version (5.8), boards in EasyMorph will be able to operate with *issues* – a major work management and automation capability that will enable a whole range of new and exciting use cases for EasyMorph, such as approval workflows, process automation, incident management, and many more.

Boards will also serve as starting points for <u>data exploration</u>, where it will be possible to navigate from one dataset to another just like you browse the internet and navigate from one web page to another.

Boards and the Catalog now form *Explorer*, a new feature that encompasses and <u>supersedes the</u> <u>Catalog</u>. Unlike the Catalog, which is Server-based, a simplified version of Explorer (without boards and the Catalog) is available in Desktop-only deployments of EasyMorph. In the simplified version, you can view .dset files (already available in v5.7) as well as computed results of .morph projects (coming in v5.7.1). In v5.8 it will be possible in Desktop-only deployments to navigate from one dataset to another using hyperlinks between datasets, the key feature of Explorer.

Besides boards and Explorer, other notable improvements in this release include:

- Email automation now you can mark emails read/unread, move to folders, and delete them
- Integration with Jira importing and creating Jira issues as well as updating their statuses
- <u>Teams Bot</u> for sending messages to channels in Microsoft Teams
- Import from Apache Parquet

### What's new

#### Boards

Boards is a new collaboration and data exploration feature of EasyMorph Server, part of Explorer. Boards are available in Desktops (including the free edition) and the Server. Desktops must be connected (linked) to EasyMorph Server to view and create boards.

Boards are composed from *sections*, stacked vertically. A board can have any combination of sections of any types. The following section types are available as of this release (more section types will be added in future releases):

- Metrics
- Tables
- Charts (simple)
- Asset shortcuts
- Text

In most cases, sections are configured from Catalog assets such as metrics, or datasets. Although, in some cases, sections can link directly to external web-pages as well as .dset files stored on Server.

Descrip	otion							
sample d	lashboard that demonstrates a fev	v metrics and	a table with dummy data.					
(Pls								
	Orders (yesterday)		Su	Ibmissions			Sales, MTD	
			25			EUR 1,0M		
	1 560			25			EUR 1,0M	
Table		Colu	Revenue ner worker		work	revenue		metro
rank	company	Colu	Revenue per worker 37 970 550	city	work	revenue 4.138.790.000	industry	metro Nashville
r <b>ank</b> 3691		Colu		<b>city</b> Franklin	109	revenue 4,138,790,000 3,487,872,233	<b>industry</b> Energy	
rank 3691 257	company Eco-Energy Global Biofuels	Colu	37,970,550 33,217,831	<b>city</b> Franklin	109	4,138,790,000	<b>industry</b> Energy Energy	Nashville
rank 3691 257 2663	company Eco-Energy Global Biofuels Bridger	Colu	37,970,550 33,217,831	city Franklin Addison San Francisco	109	4,138,790,000 3,487,872,233 5,528,202,691	<b>industry</b> Energy Energy	Nashville Dallas
rank 3691 257 2663 3442	company Eco-Energy Global Biofuels Bridger Pacific Union Real Estate	Colu	37,970,550 33,217,831 8,557,589	city Franklin Addison San Francisco Houston	109 105 646	4,138,790,000 3,487,872,233 5,528,202,691 805,736,000	industry Energy Energy Real Estate Human Resources	Nashville Dallas San Francis

Screenshot 2: A board with three sections as seen in EasyMorph Server's web UI.

### New connectors

The **Jira** connector is required for retrieving data from Jira and managing Jira issues from EasyMorph workflows.

The **Teams Bot** connector is required for the "Teams Bot" action in order to send notifications to channels in Microsoft Teams.

#### New actions

The **Email command** action performs various operations with email messages:

- Mark read/unread
- Move to folder
- Delete
- Delete permanently



The **Import from Apache Parquet** action allows importing binary data files in the Apache Parquet format (.parquet).

᠇

The Import from Jira action imports data from Jira:

- List of projects
- List of issues
- List of issue types
- List of issue statuses

5

The Jira command action performs various operations with issues in Jira:

- Create issue
- Change issue status
- Delete issue

The **Teams Bot** action sends notifications to channels in Microsoft Teams. Note that the action can't send messages into private chats, only to channels. Messages can be either plain text, or <u>Adaptive Cards</u>. In the latter case, messages can be richly formatted and contain hyperlinks, images, buttons, bulleted lists and many more. <u>Read more</u>

### Changes in existing actions

The **Calculate new column(s)** action now has an option for calculating new columns only when they don't already exist in the input dataset.

The actions **Web request** and **Import from Web API** now permit using a first column value for specifying URL parameters.

The **SharePoint command** action has got a new command – "List libraries".

# What's new in Desktop

### Explorer

The Catalog app is renamed to Explorer. In Explorer, you can:

- View and analyze datasets (.dset files) local and Server-hosted
- [postponed to v5.7.1] View and analyze computed datasets (results of .morph projects) local and Server-hosted
- Browse the Catalog (when connected to Server), create and retrieve Catalog assets
- View and design boards

As you can see in the list above, some of the Explorer functionality is still available without EasyMorph Server. In v5.8, we will be adding in Explorer the ability to navigate from one dataset to another (computed) dataset by hyperlinks between datasets (aka commands). <u>Read more about Explorer</u>

### Boards (requires EasyMorph Server)

When your Desktop is connected to EasyMorph Server, you can create, view, and edit boards.

A sample dashboard that	demonstrates	a few metrics and a	a table with c	lummy dat	а.						
Orders (yesterday)				Submissions				Sales, MTD			
1	560				25				EUR 1	OM	
•	300				25					,0101	
ank company	Column	Revenue per	city	workers re	venue	industry	metro	stat	state_long		
3691 Eco-Energy Global B.		37,970,550	-	109	4,138,790,000	•	Nashville	TN	Tennessee		
257 Bridger		33,217,831	Addison	105	3,487,872,233	Energy	Dallas	тх	Texas		
2663 Pacific Union Real E		8,557,589	San Franci	646	5,528,202,691	Real Estate	San Franci	CA	California		
3442 G&A Partners		6,714,467	Houston	120	805,736,000	Human Resources	Houston	ТΧ	Texas		
		6,147,606	Romulus	99	608,613,000	Energy	Detroit	MI	Michigan		
1560 RKA Petroleum Com		E 0.25 0.22	Bradenton	77	456,296,000	Consumer Products	Sarasota-B	FL	Florida		
1560 RKA Petroleum Com 290 It Works!		3,323,322				Human Resources	Salt Lake	UT	Utah		
290 It Works!			Salt Lake C	65	378,607,667	numan Resources					
4560 RKA Petroleum Com 290 It Works! 4727 Resource Managem 8058 Anytime Fitness		5,824,733	Salt Lake C Hastings	65 140	378,607,667 798,666,000		Minneapo	MN	Minnesota		
290 It Works! 1727 Resource Managem		5,824,733			798,666,000		Minneapo Philadelp		Minnesota New Jersey		



### Miscellaneous

- When an action is selected in a table, you can now press F1 to go to the web-help article on that action
- The Analysis View has got the "Send to sandbox" action. It sends the currently selected subset of rows into a new or existing sandbox in the current workflow
- The free edition now doesn't permit saving projects with more than 20 actions the limit of the free edition
- The free edition now doesn't permit opening projects that were modified outside of EasyMorph

# What's new in EasyMorph Server

### Explorer

The Catalog tab is renamed to Explorer. In the Explorer tab, you can:

- View and create boards
- View and create Catalog assets (metrics, computed datasets, and web links, more to follow)

View results of computations (computed datasets) and static datasets from the Catalog

Explorer is available in one space (the Default space, by default) in the Team and Enterprise editions of EasyMorph Server. It is available in all spaces when your Server license includes the Explorer Add-on (previously known as the Catalog Add-on).

### Boards

In the Explorer tab, you can view and create boards explained in the "What's new" section above.

### Analysis View

Analysis View has long been available in EasyMorph Desktop. In this release, we're making Analysis View available in the Server's web UI as well. In this initial release, Analysis View only allows viewing datasets and sorting them.

In v5.7.1 we will be adding the ability to filter datasets. In v5.8, Analysis View will also display charts and cross-tables and will allow navigating to other datasets by clicking hyperlinks in cells.

Note that Analysis View fetches the entire dataset from the Server into the memory of the user's webbrowser. This ensures instantaneous viewing and sorting (and soon, filtering) even with large datasets. However, opening big datasets make take a longer time if your network connection is slow. Note that the browser-based Analysis View currently doesn't support datasets larger than 1 GB.

EasyMorph Server	Download EasyMorph Ask Community Order Licer	se						Help
	DGudkov •							Logout
Explorer	🗢 Go to catalog							
) Tasks	Go to catalog							
	Companies							
API Endpoints	.↓ Download							
Files	To Dominosa							
Pages	rank company	Column Revenue p	er city	workers	revenue	industry	metro	state_
1 uges	3691 Eco-Energy Global Biofuels	37970550	158 Franklin	109	4138790000	Energy	Nashville	TN
	257 Bridger	33217830.	790 Addison	105	3487872233	Energy	Dallas	ΤХ
	2663 Pacific Union Real Estate	8557589.3	049 San Francisco	646	5528202691	Real Estate	San Francisco	CA
	3442 G&A Partners	6714466.6	666 Houston	120	805736000	Human Resources	Houston	тх
	4560 RKA Petroleum Companies	6147606.0	606 Romulus	99	608613000	Energy	Detroit	MI
	290 It Works!	5925922.0	779 Bradenton	77	456296000	Consumer Products &	Sarasota-Bradenton-Venice FL	FL
	4727 Resource Management	5824733.3	884 Salt Lake City	65	378607667	Human Resources	Salt Lake City	UT
	3058 Anytime Fitness	5704757.1	428 Hastings	140	798666000	Health	Minneapolis	MN
	2393 AmeriQuest Business Services	5289907.6	231 Cherry Hill	199	1052691617	Business Products & S	Philadelphia	NJ
	2624 Tandem HR	5196144.4	444 Westchester	90	467653000	Human Resources	Chicago	IL.
	1983 EnvisionRxOptions	4556087	.3825 Twinsburg	800	3644869906	Health	Akron OH	он
	4204 Flyers Energy	4395382.0	155 Auburn	450	1977921907	Energy	Truckee-Grass Valley CA	CA
	3241 Carahsoft Technology	4126766.5	95 Reston	418	1724988401	Government Services	Washington DC	VA
	1278 Knight Insurance Group	4040917.5	123 Los Angeles	59	238414135	Insurance	Los Angeles	CA
	3395 Genesis-ATC	3979351.9	958 San Antonio	239	951065127	Telecommunications	San Antonio TX	тх
	2506 BrightStar Care	3831732.6	Gumee	65	249062623	Health	Chicago	IL .
	3533 American Global Logistics	3776113.2	75 Atlanta	53	200134000	Logistics & Transportat	Atlanta	GA
	2537 Transportation Insight	3704650.5	376 Hickory	186	689065000	Logistics & Transportat	Hickory-Lenoir-Morganton NC	NC
	4654 Advanced BloEnergy	3611746.20	Bloomington	67	241987000	Energy	Minneapolis	MN
	4344 immixGroup	3580746.4	319 McLean	257	000051922	IT Services	Washington DC	VA

Screenshot 4: Analysis View in EasyMorph Server's UI.

### Shared Memory commands in ems-cmd

The command-line client utility ems-cmd has got three more commands that make it possible for external applications and scripts to operate with values in Server's Shared Memory, the built-in key-value store. The syntax for the new commands is as follows:

Remember – saves the specified value in Shared Memory

ems-cmd remember http://server\_host:6330 -space Default password your\_password -key path1\path2\abc -value XYZ

• *Recall* – reads the value associated with the specified key and prints it into the console

ems-cmd recall http:// server\_host:6330 -space Default -password your\_password -key path1\path2\abc

Forget – removes the specified key and the value associated with it

```
ems-cmd forget http://192.168.100.200:6330 -space Default -
password your_password -key path1\path2\abc
```

This addition enables a range of new integration scenarios between EasyMorph Server and external applications. For instance:

- External applications set values of <u>metrics</u> in the Catalog and boards
- External applications read environment configuration parameters from the Server (e.g. API keys).
- EasyMorph Server operates as a common key-value store for multiple external applications that exchange data between each other through EasyMorph Server

### Miscellaneous

- Email notifications about failed tasks can now be turned on and off in each space individually
- Now if a Server worker crashes, it restarts automatically after 120 seconds. An email notification
  is sent to the Server administrator

## Previous release notes

Link: Release notes for v5.6.2