
Article

[Henrique Dias](#) · Aug 20, 2019 2m read

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Dashboard IRIS History Monitor

Hi, everyone!

I want to share a personal project that started with a simple request at work:

Is it's possible to know how many Caché licenses we are using?

Reading other articles here in the community, I found this excellent article by [David Loveluck](#)

APM - Using the Caché History Monitor

<https://community.intersystems.com/post/apm-using-cach%C3%A9-history-monitor>

So, using David's article, I started using Caché History Monitor and to show all that information.

When facing the question: Which cool tech should I use?

My decision was CSP, simple and powerful, so the customer that I'm working for can realize that Caché it's more than just MUMPS/Terminal.

After creating the pages to show the history of Licensing, Database Growth, and CSP Sessions, I've decided to create a new design for the System Dashboard and Processes page.

Everything works great with my Caché instance.

However, how about IRIS?

Following the article by [Evgeny Shvarov](#)

Using Docker with your InterSystems IRIS development repository

<https://community.intersystems.com/post/using-docker-your-intersystems-iris-development-repository>

I dockerized and put the code on GitHub, so now, everyone can try with a few steps.

How to Run

To start coding with this repo, you do the following:

1. Clone/git pull the [repo](#) into any local directory
`$ git clone https://github.com/diashenrique/iris-history-monitor.git`
2. Open the terminal in this directory and run:
`$ docker-compose build`
3. Run the IRIS container with your project:

```
$ docker-compose up -d
```

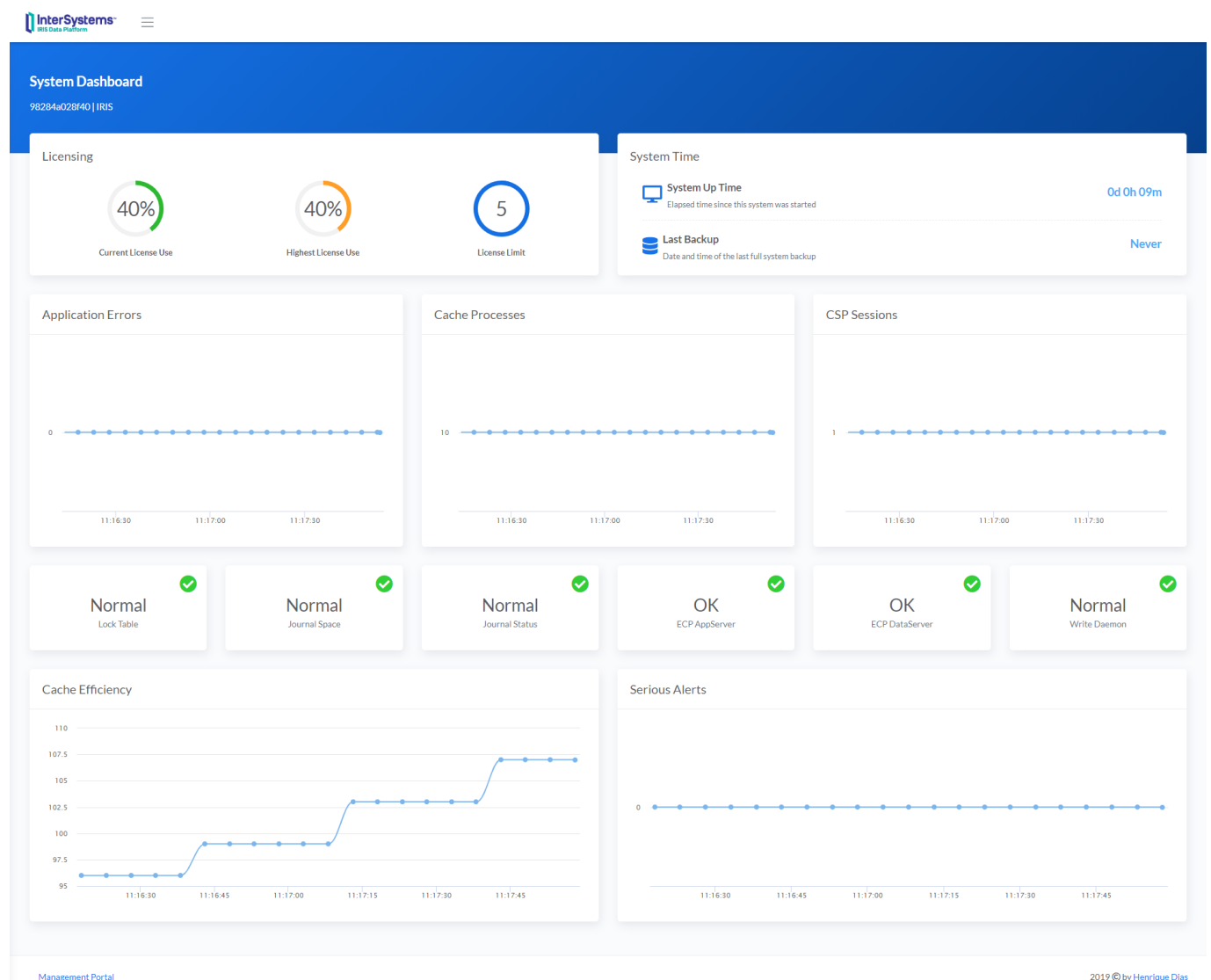
How to test

Open the browser and go

Ex.: <http://localhost:52773/csp/irismonitor/dashboard.csp>

The username SYSTEM can run the dashboard and the other features.

System Dashboard

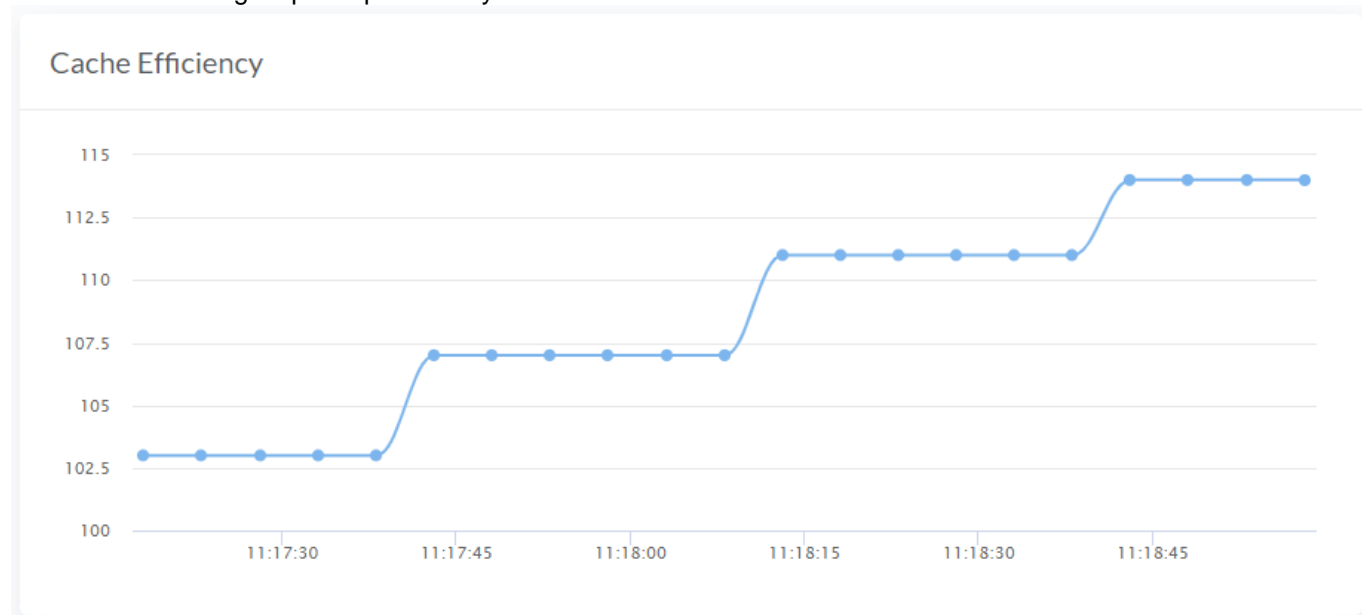


System Dashboard shows the following items:

- Licensing
- System Time
- Application Errors
- Cache Processes
- CSP Sessions
- Lock Table
- Journal Space

- Journal Status
- ECP AppServer
- ECP DataServer
- Write Daemon
- Cache Efficiency
- Serious Alerts

The line charts widgets plot a point every 5 seconds



System Menu



System Dashboard

4d8b544bdc5a | IRIS


Licensing



Current License Use

Application Errors

System Processes



System Processes
98284a028f40 | IRIS

Processes

Auto Refresh

OFF

seconds

Search...

Job #	Pid	Display PID	Username	Device	Nspace	Routine	Commands	Globals	State	Client Name	EXE Name	IP Address	OSUser Name
1	363	363				CONTROL	0	0	RUN				root
2	364	364				WRTDMN	439	640	RUNW				root
3	365	365				GARCOL	0	0	RUNW				root
4	366	366				JRNDMN	4722	0	RUNW				root
5	374	374				EXPDMN	0	0	RUNW				root
6	367	367				SWRTDMN	2	16	RUNW				root
7	368	368				SWRTDMN	2	16	RUNW				root
8	369	369				SWRTDMN	2	16	RUNW				root
9	370	370				SWRTDMN	2	16	RUNW				root
10	371	371				SWRTDMN	2	16	RUNW				root
11	372	372				SWRTDMN	2	16	RUNW				root
12	373	373				SWRTDMN	2	16	RUNW				root
13	535	535	TASKMGR	/dev/null	%SYS	%SYS.TaskSuper.1	78418	3417	EVTW				irisusr
14	376	376		/dev/null	%SYS	MONITOR	26877	70	EVTW				irisusr
15	377	377		/dev/null	%SYS	CLNDMN	472	44	RUNW				irisusr
16	379	379		/dev/null	%SYS	RECEIVE	16281	864	HANG				irisusr
17	380	380		/dev/null	%SYS	ECPWork	0	0	RUNW				irisusr
18	381	381		[TCP]51773	%SYS	%SYS.SERVER	0	0	READ				irisusr
19	383	383		/dev/null	%SYS	LMFMON	819	71	HANG				irisusr
20	567	567	CSPSystem	[TCP]irisdevshome.net:51773	IRISMONITOR	%SYS.cspServer2	2055270	417175	READ	irisdevshome.net	CSPap.so	172.17.34.65	CSP Gateway

Page 1 of 2 (29 items)

Processes Filters

Processes

Auto Refresh

OFF

seconds

Search...

Job #	Pid	Display PID	Username	Device	Nspace	Routine	Commands	Globals	State	Client Name	EXE Name	IP Address	OSUser Name
1	363	363				CONTROL	0	0	RUN				root
2	364	364				WRTDMN	439	640	RUNW				root
3	365	365				GARCOL	0	0	RUNW				root
4	366	366				JRNDMN	4722	0	RUNW				root
5	374	374				EXPDMN	0	0	RUNW				root
6	367	367				SWRTDMN	2	16	RUNW				root
7	368	368				SWRTDMN	2	16	RUNW				root
8	369	369				SWRTDMN	2	16	RUNW				root
9	370	370				SWRTDMN	2	16	RUNW				root
10	371	371				SWRTDMN	2	16	RUNW				root
11	372	372				SWRTDMN	2	16	RUNW				root
12	373	373				SWRTDMN	2	16	RUNW				root
13	535	535	TASKMGR	/dev/null	%SYS	%SYS.TaskSuper.1	78418	3417	EVTW				irisusr
14	376	376		/dev/null	%SYS	MONITOR	26877	70	EVTW				irisusr

Use different filters to achieve the result that you need. You can also use Multiple Sorts, pressing Shift + clicking on the column header. And even export the data grid to Excel!

System Process Explorer - Excel															
Job #															
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Job #	Pid	Display PID	Username	Device	Nspace	Routine	Commands	Globals	State	Client Name	EXE Name	IP Address	OSUser Name		
22	568	568		/dev/null	%SYS	%CSP.Daemon.1	2358	320	HANG				Irisusr		
23	569	569	CSPSystem	[TCP]irisdev.mshome.net:51773	%SYS	%SYS.cspServer2	540815	88174	READ	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway		
26	574	574	CSPSystem	[TCP]irisdev.mshome.net:51773	%SYS	%SYS.cspServer2	58345	2816	READ	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway		
27	575	575	CSPSystem	[TCP]irisdev.mshome.net:51773	%SYS	%SYS.cspServer2	202555	30319	READ	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway		
28	576	576	CSPSystem	[TCP]irisdev.mshome.net:51773	IRISMONITOR	%SYS.cspServer2	505112	88302	READ	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway		
29	577	577	CSPSystem	[TCP]irisdev.mshome.net:51773	%SYS	%SYS.cspServer2	6992	225	READ	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway		
31	861	861	CSPSystem	[TCP]irisdev.mshome.net:51773	%SYS	%SYS.cspServer2	11351	417	READ	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway		
32	862	862	CSPSystem	[TCP]irisdev.mshome.net:51773	%SYS	%SYS.cspServer2	18448	2961	READ	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway		
10	24	572	572	CSPSystem	[TCP]127.0.0.1:51773	%SYS	%SYS.cspServer3	1000	46	READ	CSPap.so	127.0.0.1	CSP Gateway		
11	25	573	573	CSPSystem	[TCP]127.0.0.1:51773	%SYS	%SYS.cspServer3	1620	274	READ	CSPap.so	127.0.0.1	CSP Gateway		
12	21	679	679	root	/dev/null	%SYS	%SYS.Monitor.Control.1	2071565	16885	EVTW			root		
13	20	567	567	_SYSTEM	[TCP]irisdev.mshome.net:51773	%SYS	%SYS.ProcessQuery.1	1699071	374489	RUN	irisdev.mshome.net	CSPap.so	172.17.34.65	CSP Gateway	
14	18	381	381		[TCP]51773	%SYS	%SYS.SERVER	0	0	READ			Irisusr		
15	13	535	535	TASKMGR	/dev/null	%SYS	%SYS.TaskSuper.1	15087	727	EVTW			Irisusr		
16	15	377	377		/dev/null	%SYS	CLNDMN	0	0	RUNW			Irisusr		
17	1	363	363				CONTROL	0	0	RUN			root		
18	17	380	380		/dev/null	%SYS	ECPWork	0	0	RUNW			Irisusr		
19	5	374	374				EXPDMN	0	0	RUNW			root		
20	3	365	365				GARCOL	0	0	RUNW			root		
21	4	366	366				JRNDMN	559	0	RUNW			root		
22	19	383	383		/dev/null	%SYS	LMFMON	564	71	HANG			Irisusr		
23	14	376	376		/dev/null	%SYS	MONITOR	5955	67	EVTW			Irisusr		
24	16	379	379		/dev/null	%SYS	RECEIVE	2001	113	HANG			Irisusr		
25	30	624	624	root	/dev/pts/0	IRISMONITOR	shell	8703	205	READ	CON:		root		
26	6	367	367				SWRTDMN	2	16	RUNW			root		
27	7	368	368				SWRTDMN	2	16	RUNW			root		
28	8	369	369				SWRTDMN	2	16	RUNW			root		
29	9	370	370				SWRTDMN	2	16	RUNW			root		
30	10	371	371				SWRTDMN	2	16	RUNW			root		
31	11	372	372				SWRTDMN	2	16	RUNW			root		
32	12	373	373				SWRTDMN	2	16	RUNW			root		
33	2	364	364				WRTDMN	88	278	RUNW			root		

History Monitor

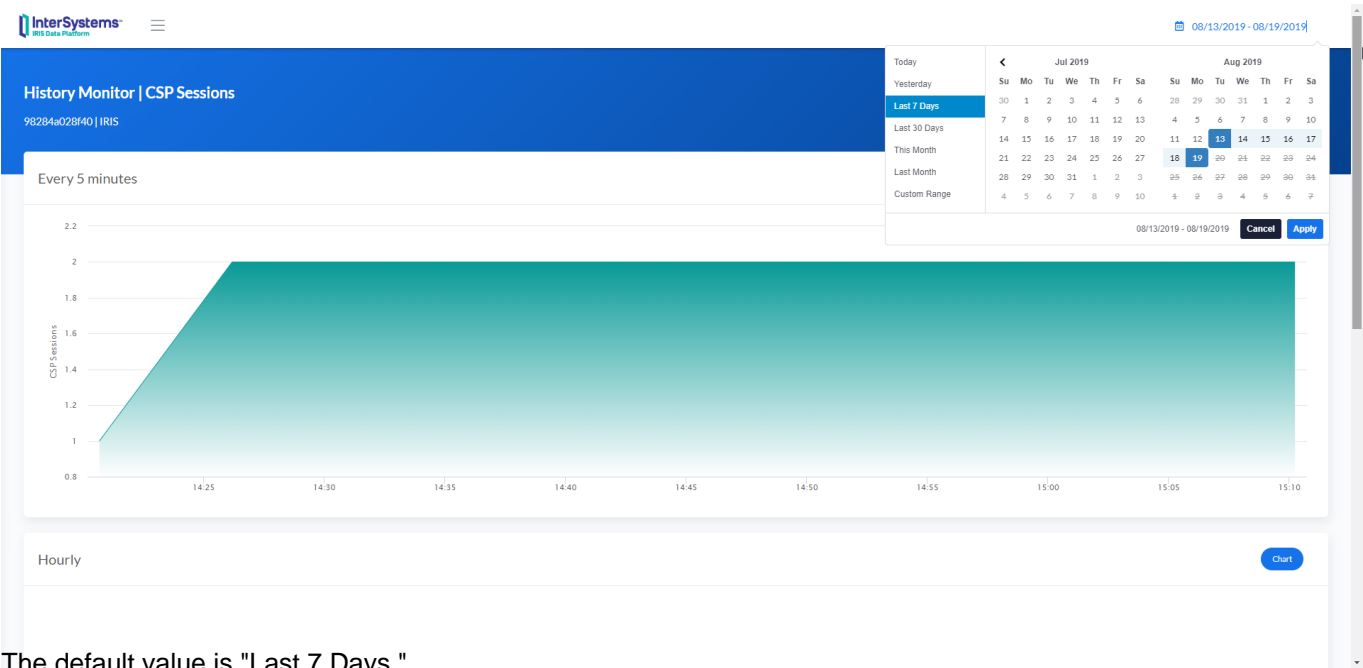
The History Monitor for CSP Sessions and Licensing shows the information between three sections:

- Every 5 Minutes
- Daily
- Hourly

Database Growth only shows Daily information.

The history pages share the features below:

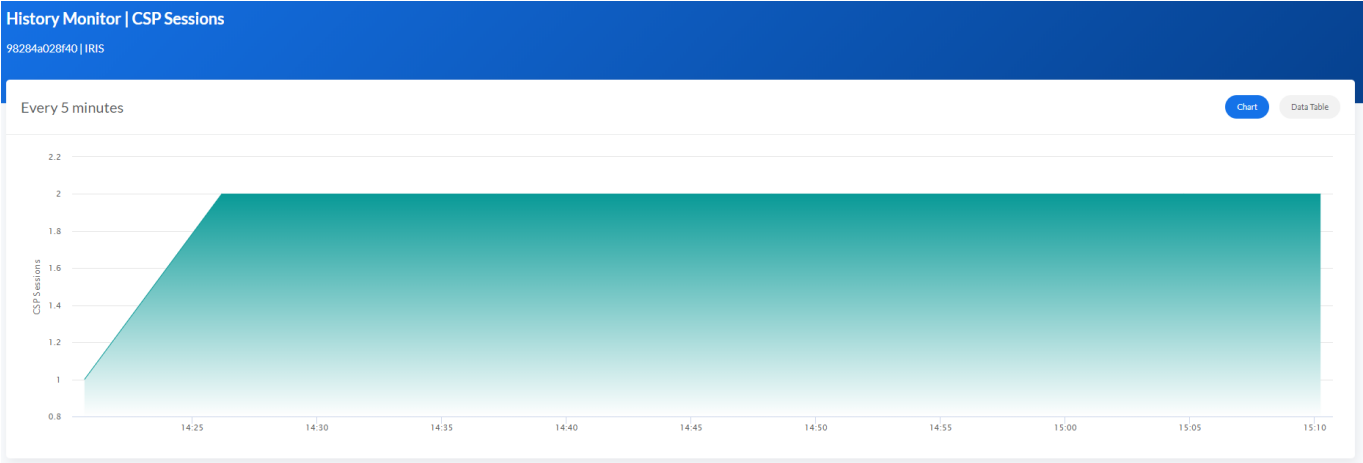
Date Range Picker



The default value is "Last 7 Days."

Chart / Data Table

On the top right of every each section, there are two buttons (Chart/Data Table)



The Data Table shows the information that creates the chart, and you can also download in Excel format.

History Monitor | CSP Sessions

98284a028f40 | IRIS

Every 5 minutes

Chart

Data Table

Date ↑

Time

Csp Sessions

▼ Date: 19/08/2019 (Continues on the next page)

14:20:41	1
14:26:11	2
14:31:41	2
14:37:12	2
14:42:42	2
14:48:13	2
14:53:43	2
14:59:14	2
15:04:44	2

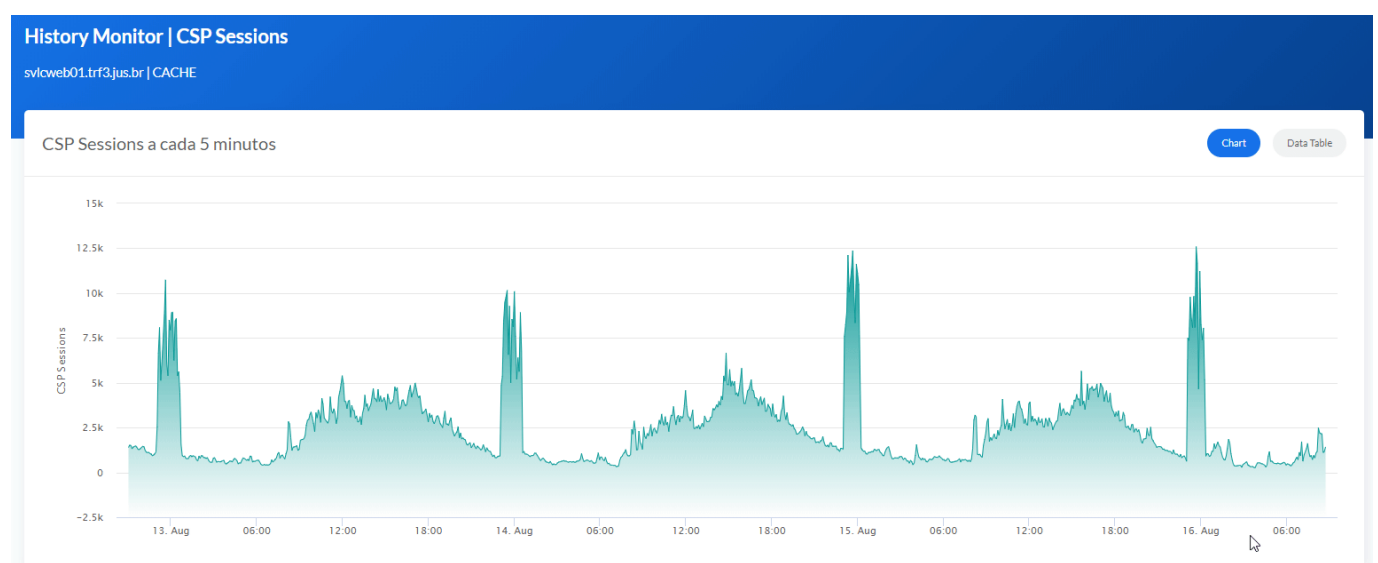
1 2

Salvamento Automático <input type="checkbox"/>					
Arquivo				Página Inicial	
Inserir				Layout da Página	
M22					
1	2			A	B
	1	Time		Csp	
	2	Date: 19/08/2019			
	3	14:20:41		1	
	4	14:26:11		2	
	5	14:31:41		2	
	6	14:37:12		2	
	7	14:42:42		2	
	8	14:48:13		2	
	9	14:53:43		2	
	10	14:59:14		2	
	11	15:04:44		2	
	12	15:10:14		2	
	13				

The excel shows the same format, content, and group defined in the CSP.

Zooming

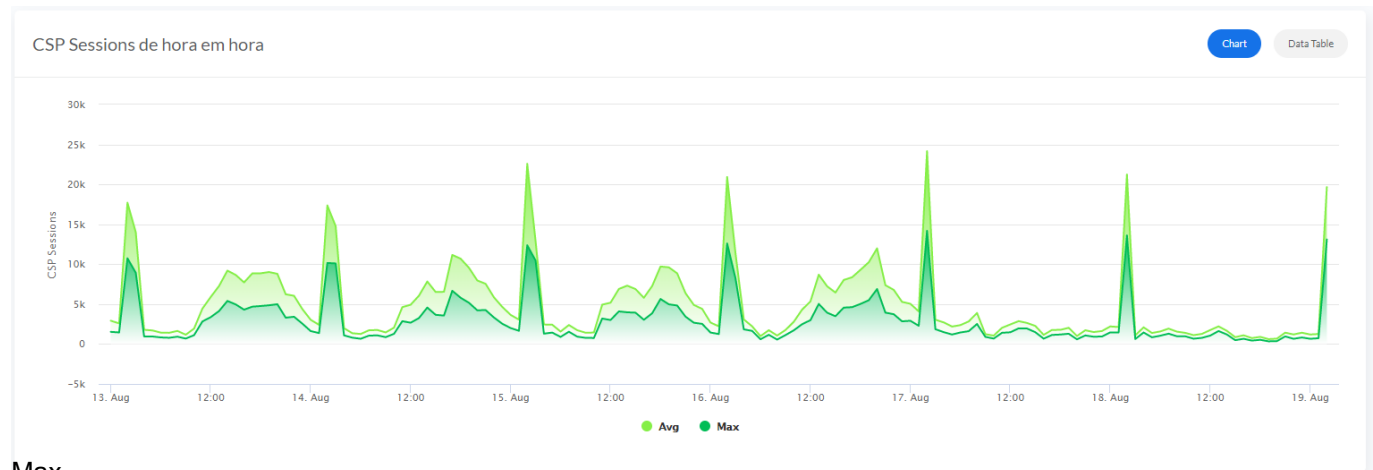
All charts have the Zoom option to visualize the information with more details.



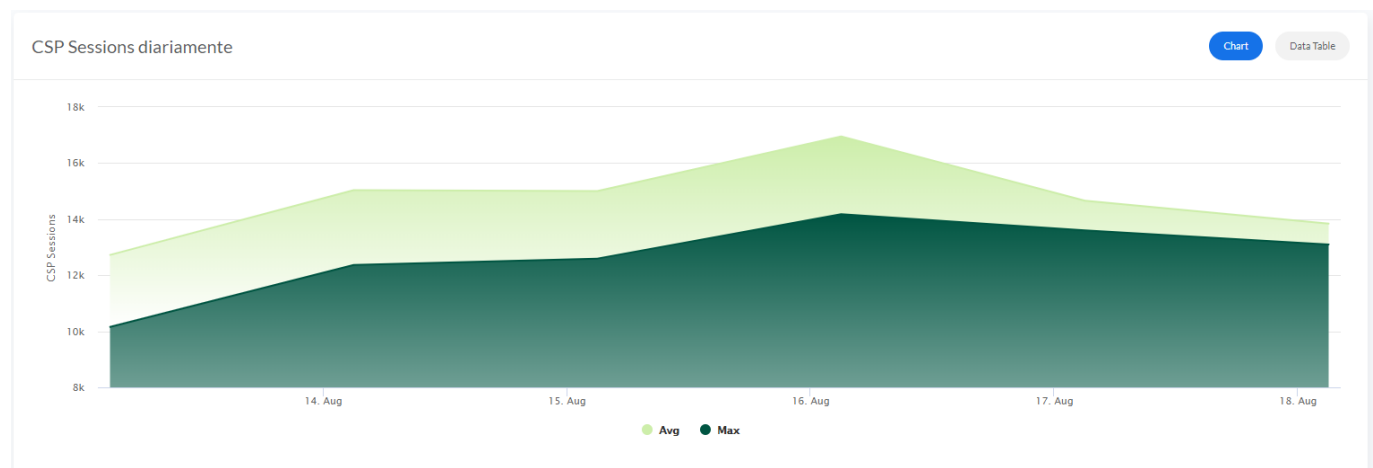
Average and Maximum

For the Sections Hourly and Daily, the charts show Average and Maximum values.

AVG



Max



Enjoy!

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[#Open Exchange](#)
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Source URL: <https://community.intersystems.com/post/dashboard-iris-history-monitor>