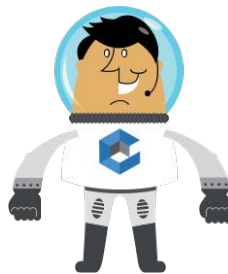


CyberArk Privileged Access Security Environment Report

Version v11.5



CyberArk
Example Environment



Sunday, July 12, 2020 - 07:27 PM

Table of Contents

1. Installed Product Versions	4
2. License Capacity	5
3. Account Management	6
3.1 Account statistics	6
3.2 Master policy settings	7
3.3 Managed accounts	8
3.4 Accounts not managed reasons	8
3.5 Compliant accounts	9
3.6 Accounts by device type	10
3.7 Accounts by policy	11
3.8 Accounts by creation method	12
3.9 Accounts creators	13
3.10 Accounts disabled by	14
3.11 Accounts per CPM	15
3.12 Accounts development	16
3.13 Accounts development by policy	16
3.14 Accounts development by device type	17
3.15 Accounts development by creation method	17
4. Safe Management	18
4.1 Safe statistics	18
4.2 Objects in Vault	19
4.3 Objects per safe	20
4.4 Safes by used size	21
4.5 Safe creators	22
4.6 Safes by retention type	23
4.7 Most used retention settings	24
4.8 Safes creation	25
4.9 Objects development	25
4.10 Data development	26
5. Session Management	27
5.1 Session statistics	27
5.2 Sessions by PSM solution	29
5.3 Sessions by PSM solution server ID	30
5.4 Sessions by weekday	31
5.5 Sessions by daytime hour	32
5.6 Sessions by connection component	33
5.7 Sessions by policy	34
5.8 Sessions by device type	35
5.9 Sessions by session duration	36
5.10 Target systems by PSM solution	37
5.11 Target accounts by PSM solution	38
5.12 Sessions per user	39

5.13 Sessions per target system	39
5.14 Sessions per target account	40
5.15 Max concurrent sessions by PSM server ID	40
5.16 Max concurrent sessions by connection component	41
5.17 Max concurrent sessions by user	41
5.18 Sessions per day	42
5.19 Sessions by PSM solution per day	42
5.20 Sessions by PSM server ID per day	43
5.21 Sessions by connection component per day	43
5.22 Maximum concurrent sessions per day	44
5.23 Maximum concurrent sessions by PSM solution per day	44
5.24 Maximum concurrent OPM sessions per day	45
5.25 Maximum concurrent sessions by PSM server ID per day	45
5.26 Maximum concurrent sessions by connection component per day	46
5.27 Maximum concurrent sessions by connection component per day	46
5.28 Recordings development	47
5.29 Recordings size development	47
6. User management	48
6.1 User statistics	48
6.2 Users by user type	49
6.3 Users by origin	50
6.4 Users by mapping	51
6.5 Users by LDAP directory	52
6.6 Users by last logon	53
6.7 EPV users by authentication method	54
6.8 User authorizations	55
6.9 Users by audit log retention	55
6.10 Groups by origin	56
6.11 Groups by LDAP directory	57
6.12 Members of builtin groups	58
6.13 Users development	58
6.14 Users development by user type	59
6.15 Users development by mapping	59
6.16 Users development by LDAP directory	60
7. Permission management	61
7.1 Permissions statistics	61
7.2 EPV users with list access on % of all accounts	62
7.3 EPV users with list + retrieve password access on % of all accounts	62
7.4 EPV users with list + retrieve + w/o confirmation access on % of all accounts	63
7.5 EPV users with list + use password access on % of all accounts	63
7.6 EPV users with list + use + w/o confirmation on % of all accounts	64
7.7 Accounts per AAM provider	64
7.8 Accounts per AAM application	65
7.9 Accounts per OPM agent	65

1. Installed Product Versions

Component	Version	InstalledComponents	DisabledComponents
Vault (Primary)	11.5.0.14	1	0
AAM Provider	10.10.0.628	2	0
AAM Provider	11.2.0.11	2	0
AAM Provider	7.20.92.0	2	0
CPM	11.5.0.2	1	0
PSM	11.4.0.6	1	0
PSM for SSH	10.6.0.0	1	0
PSM for SSH	11.4.0.0	1	0
PVWA	11.5.0.2	1	0

2. License Capacity

Licensed object	Description	Used	Used (%)	Maximum
EPVUser	Enterprise Password Vault End User	18	72	25
AIMAccount	Application Account	8	3.2	250
CPM	Central Policy Manager	1	25	4
PVWA	Password Vault Web Access	1	20	5
PSM	Privileged Session Manager	1	20	5
AppProvider	Application Password Provider	6	24	25
iSeriesApp	iSeries Application User	0	0	2
OPMProvider	On-demand Privileges Manager Provider	1	20	5
CCPEndpoints	CCP Endpoints	0	0	25
zOSAIMUser	zOS AIM User	0	0	2
PSMUser	Privileged Session Manager User	0	0	5
IBVUser	Human IBV User (Business User, IT User, Endpoint User)	0	0	10
AutoIBVUser	File Transfer Automation User	0	0	10
CIFS	CIFS Connector	0	0	2
FTP	FTP Connector	0	0	2
SFE	Secure File Exchange	0	0	2
DCAUser	Backend DCA	0	0	10
DCAInstance	Single DCA Instance	0	0	2
SecureEpClientUser	Secure End-Point Client User	0	0	10
ClientlessUser	Clientless User Licenses	0	0	10
AdHocRecipient	Ad-hoc Recipient	0	0	50
SecureEmailUser	SecureEmail User	0	0	10
SDVSDK	SDV SDK User	0	0	1
SEG	Secure Email Gateway	0	0	1
PSMPServer	Privileged Session Manager SSH Proxy	2	40	5
AllUsers	All ClientIds	0	0	30
DR_User	DR user	0	0	1
External_Users	External users	0	0	10
BizUser	Business users	0	0	10
PTA	Privileged Threat Analytics	1	10	10
ENE	Event notification engine user	1	10	1
PSMPADBridge	Privileged Session Manager SSH Proxy ADBridge	1	20	5
PSMForServers	PSM For Servers Count	0	0	25
PSMForDB	PSM For DB Count	0	0	0
PSMForVM	PSM For VM Count	0	0	0
SSHKeyManager	SSH Keys Target Systems	0	0	50

3. Account Management

3.1 Account statistics

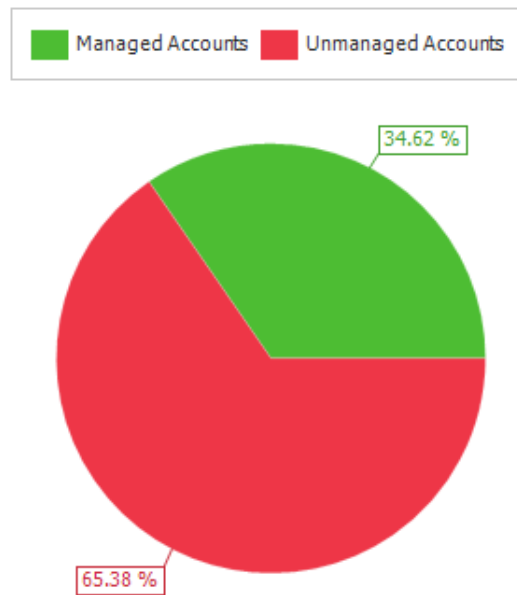
Description	Statistic	Comments
Total number of accounts	104	excluding 0 deleted accounts, 12 temporary CPM account objects, 0 Ad-Hoc connection account objects, and 48 pending accounts
Managed accounts	36	34.62 % Managed account = account that is not disabled manually (by human users) AND that is assigned to a policy which has periodic change enabled AND has at least one none-disabled CPM assigned as owner on its safe AND can be accessed by CPMs according to the AllowedSafes platform policy setting
Compliant accounts	25	69.44 % of managed accounts
Non-compliant accounts	11	30.56 % of managed accounts
Deleted accounts	0	Accounts that are marked for deletion excluding 2 deleted temporary account objects
Pending accounts	48	
Number of policies	38	Policies that have accounts assigned
Accounts assigned to policies	98	94.23 %
Accounts with no policy assignment	6	5.77 %
Disabled accounts	39	37.5 %
Accounts disabled by CPM	3	7.69 % of all disabled accounts
Accounts disabled by users	36	92.31 % of all disabled accounts
Average accounts per safe	1	rounded to whole number
Average created accounts per month	11	The number includes accounts that were deleted in the meantime. Rounded to whole number
Average deleted accounts per month	0	
Average account growth per month	11	Effective accounts growth per month

3.2 Master policy settings

Setting	Active	Policies	Accounts
Session monitoring and isolation	Yes	38	98
Record and save session activity	Yes	38	98
One-time password	Yes	3	7
One-time password	No	35	91
Exclusive access	Yes	2	3
Exclusive access	No	36	95
Dual control approval	Yes	3	20
Dual control approval	No	35	78
Multi-level approval	No	38	98
Only direct managers can approve	No	38	98
Require reason for access	No	38	98
Allow transparent connections	Yes	38	98
Allow users to view passwords	Yes	38	98

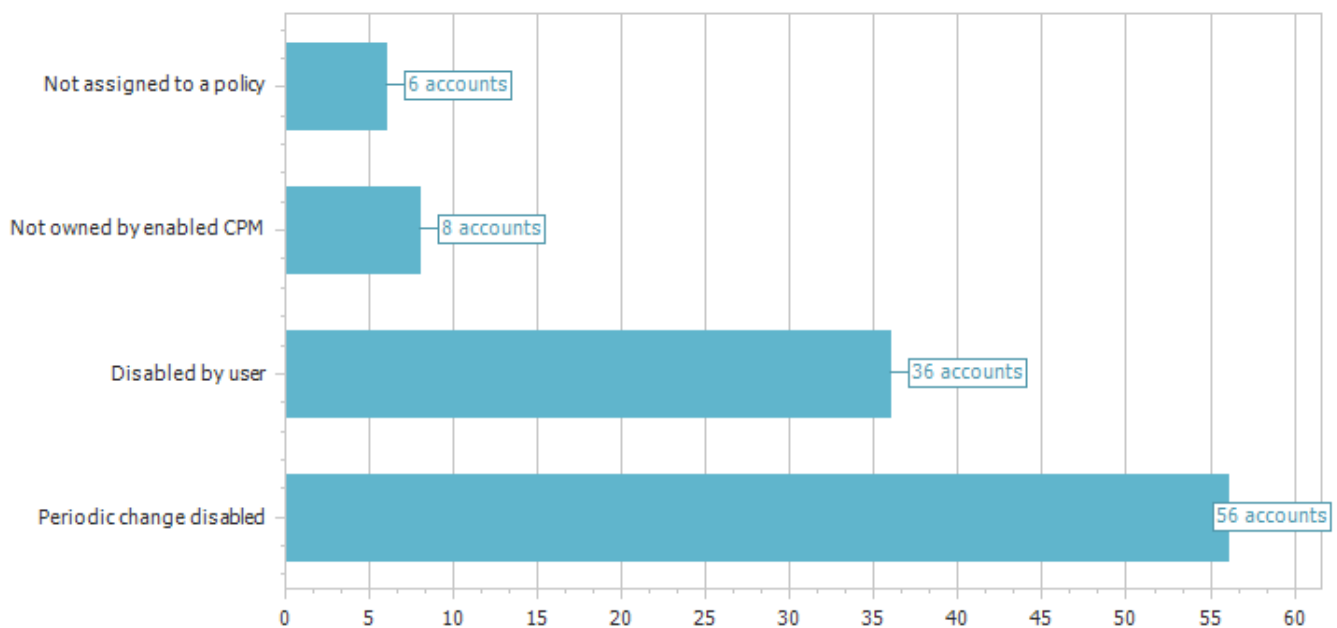
3.3 Managed accounts

Managed accounts (%)



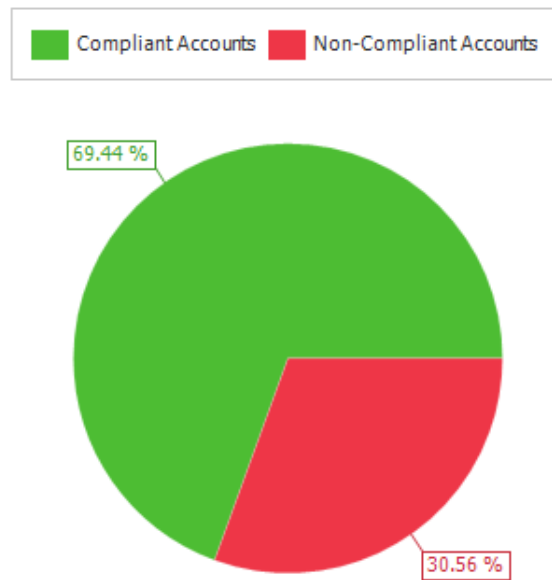
3.4 Accounts not managed reasons

Accounts not managed reasons (several reasons can apply)

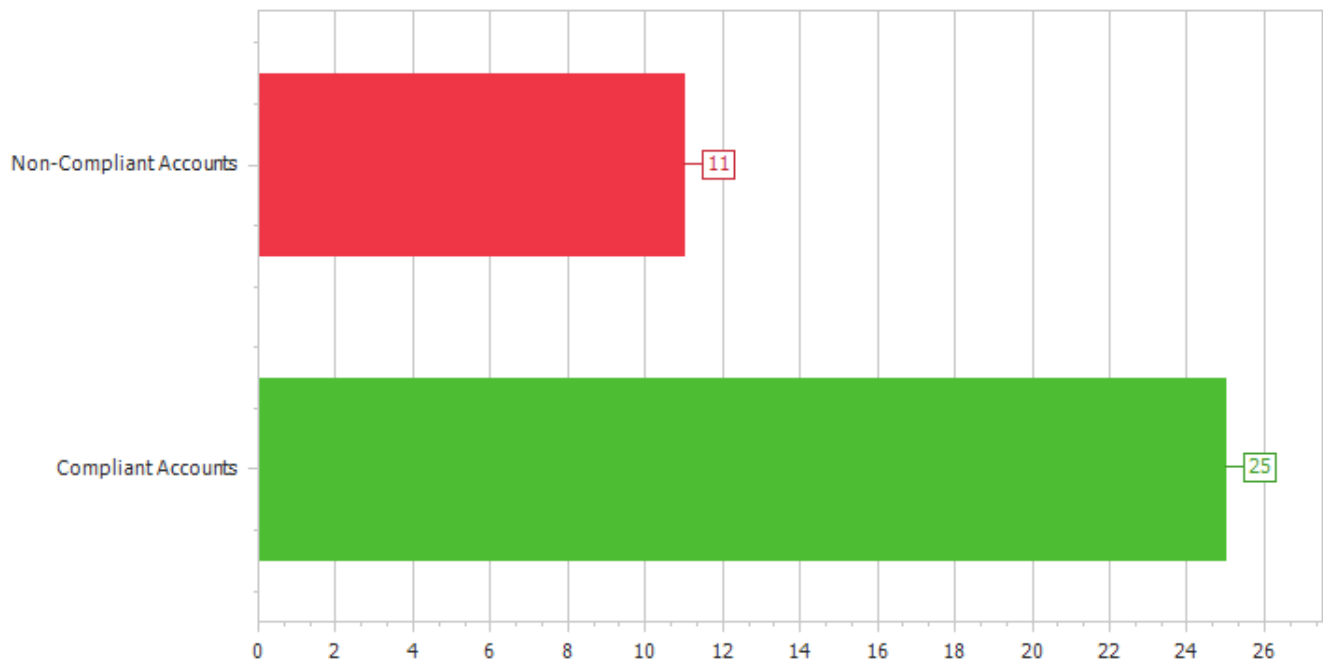


3.5 Compliant accounts

Compliant accounts (%)

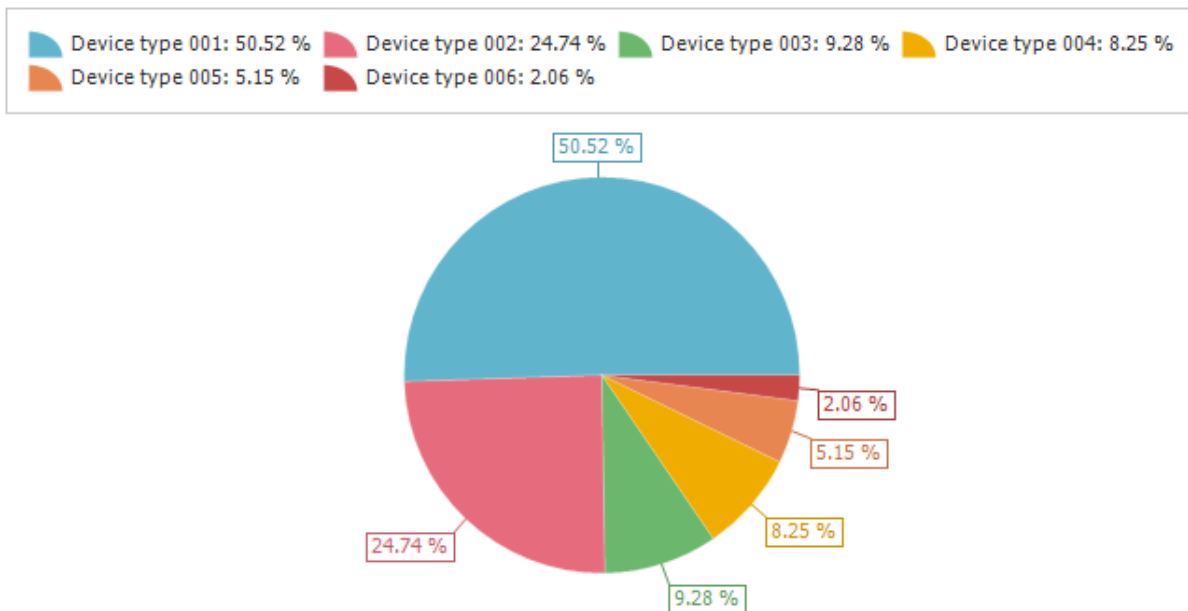


Compliant accounts

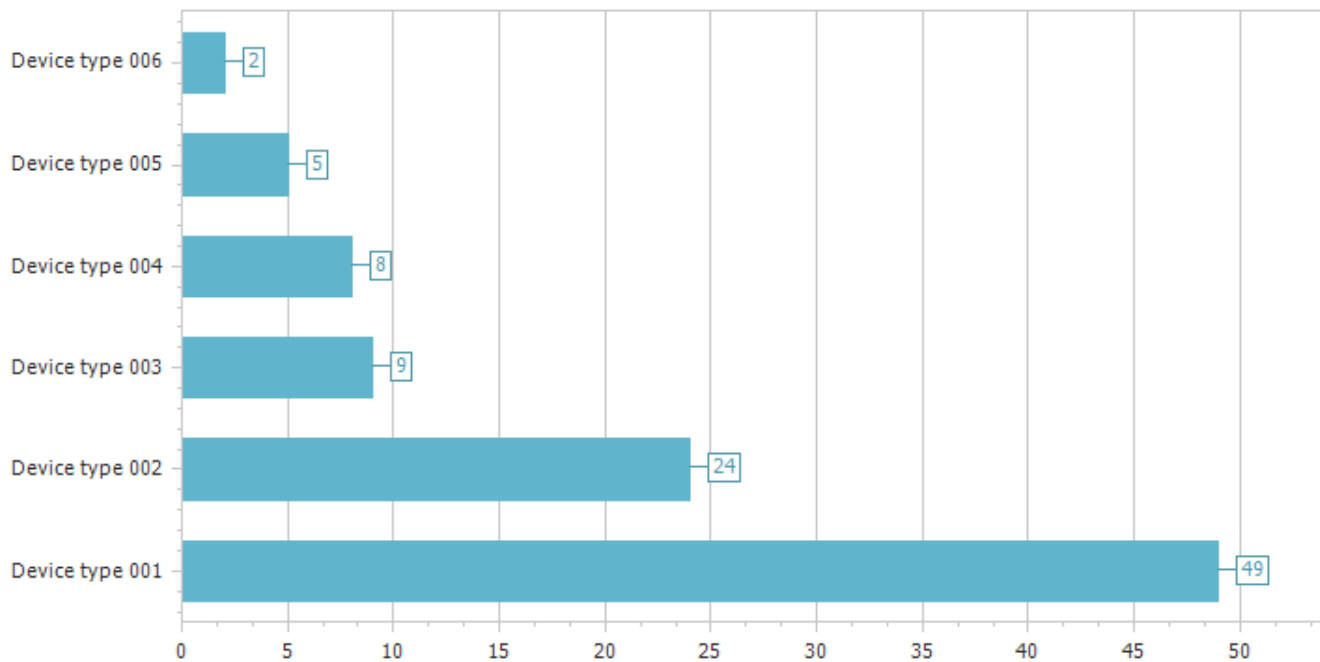


3.6 Accounts by device type

Accounts by device type (%) - Top 10

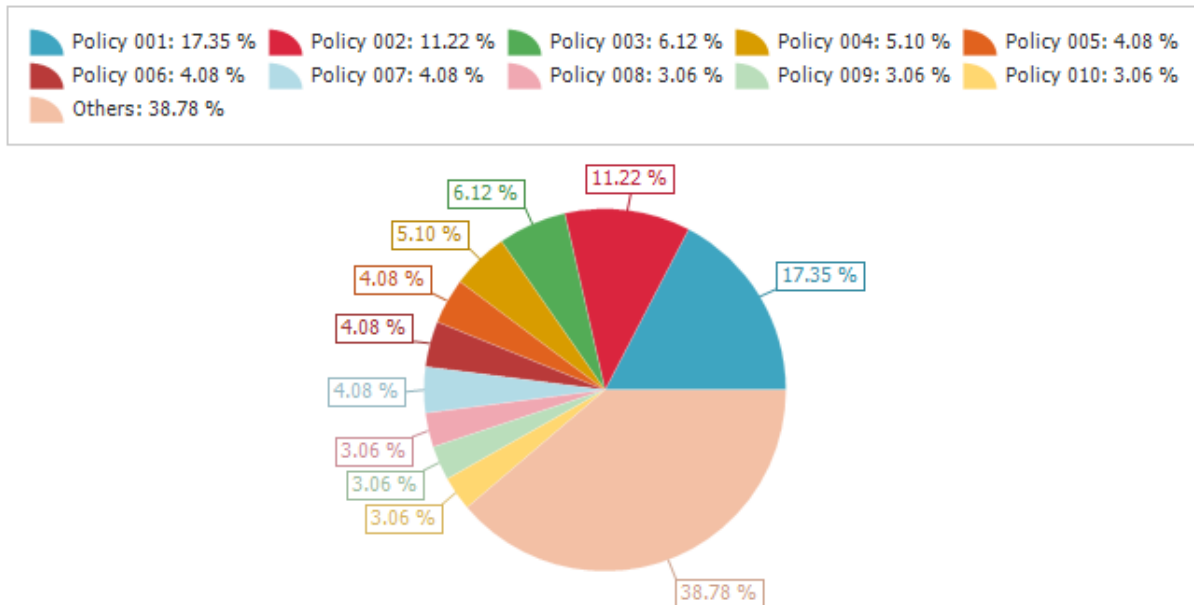


Accounts by device type - Top 10

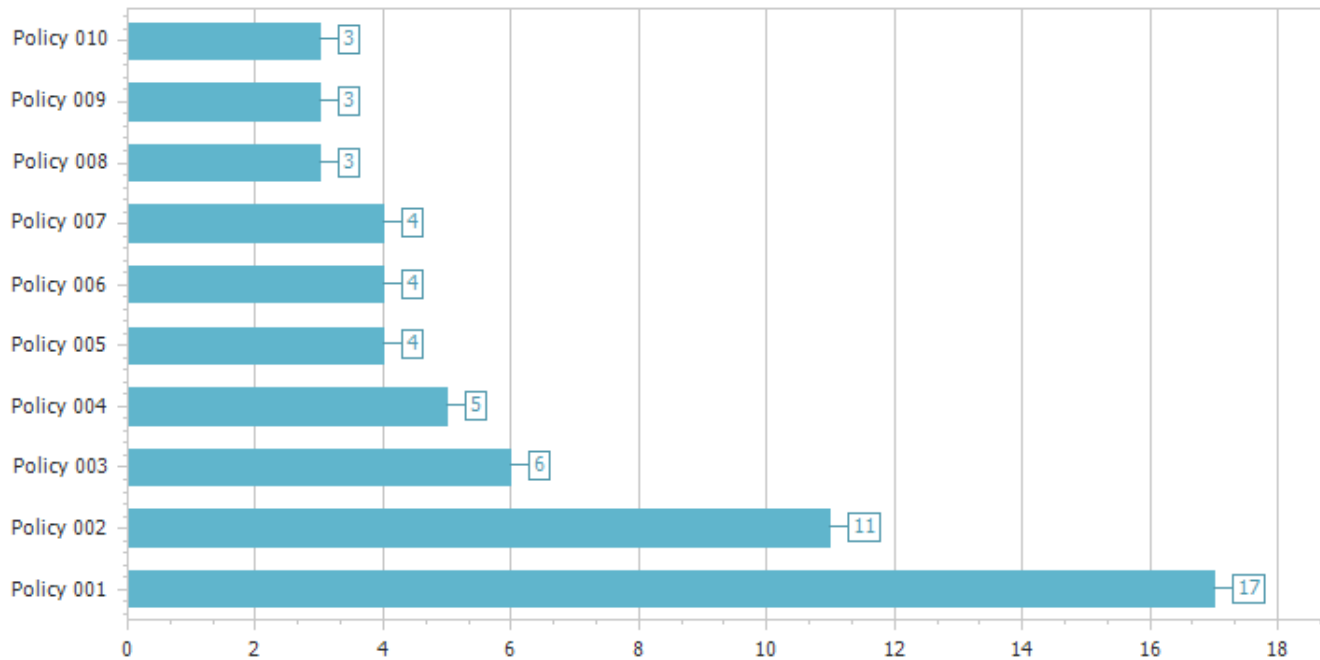


3.7 Accounts by policy

Accounts by policy (%) - Top 10

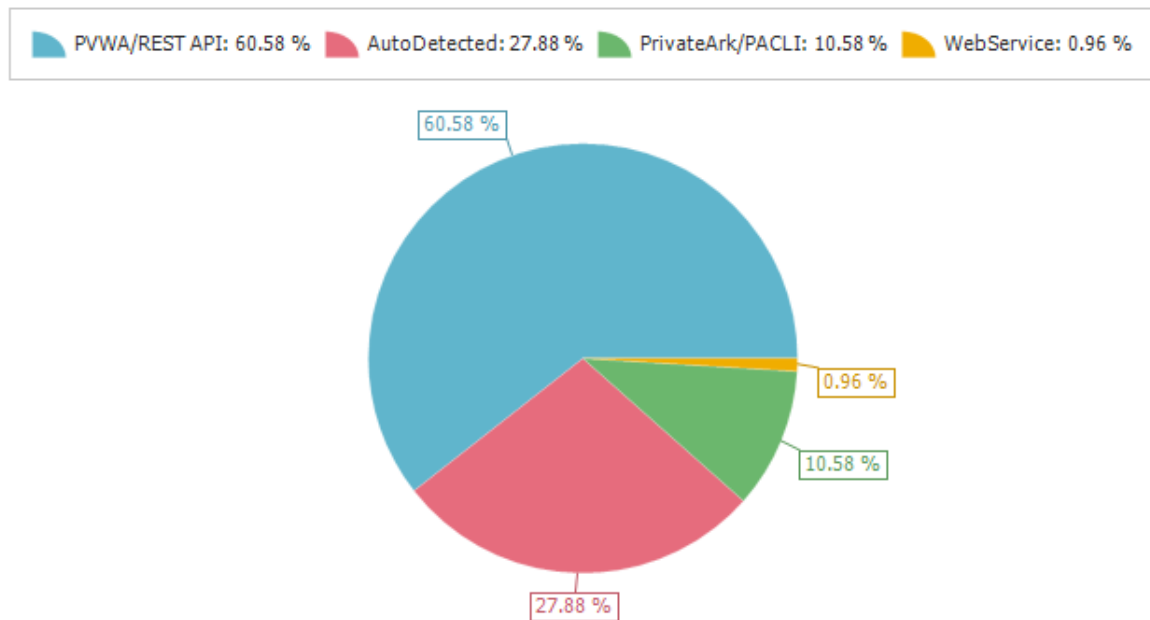


Accounts by policy - Top 10

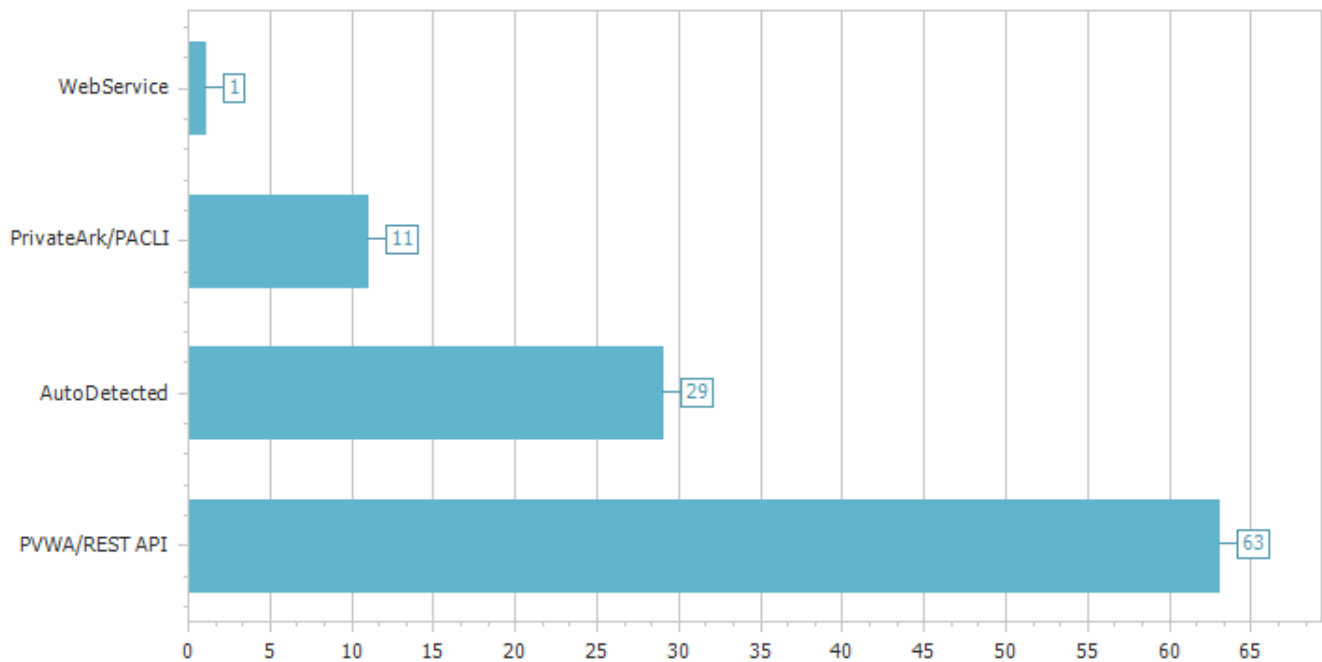


3.8 Accounts by creation method

Accounts by creation method (%)

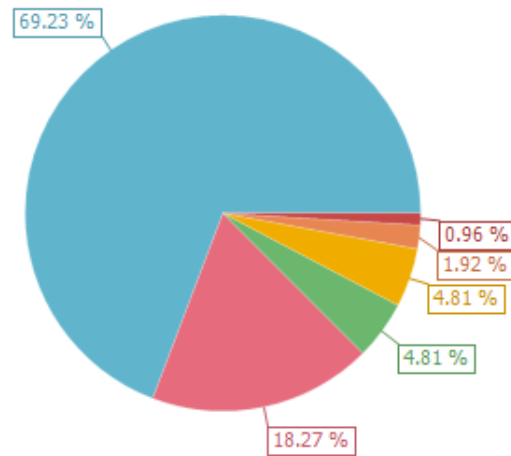
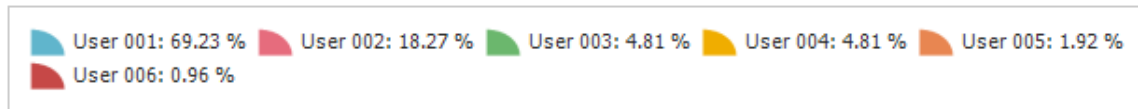


Accounts by creation method

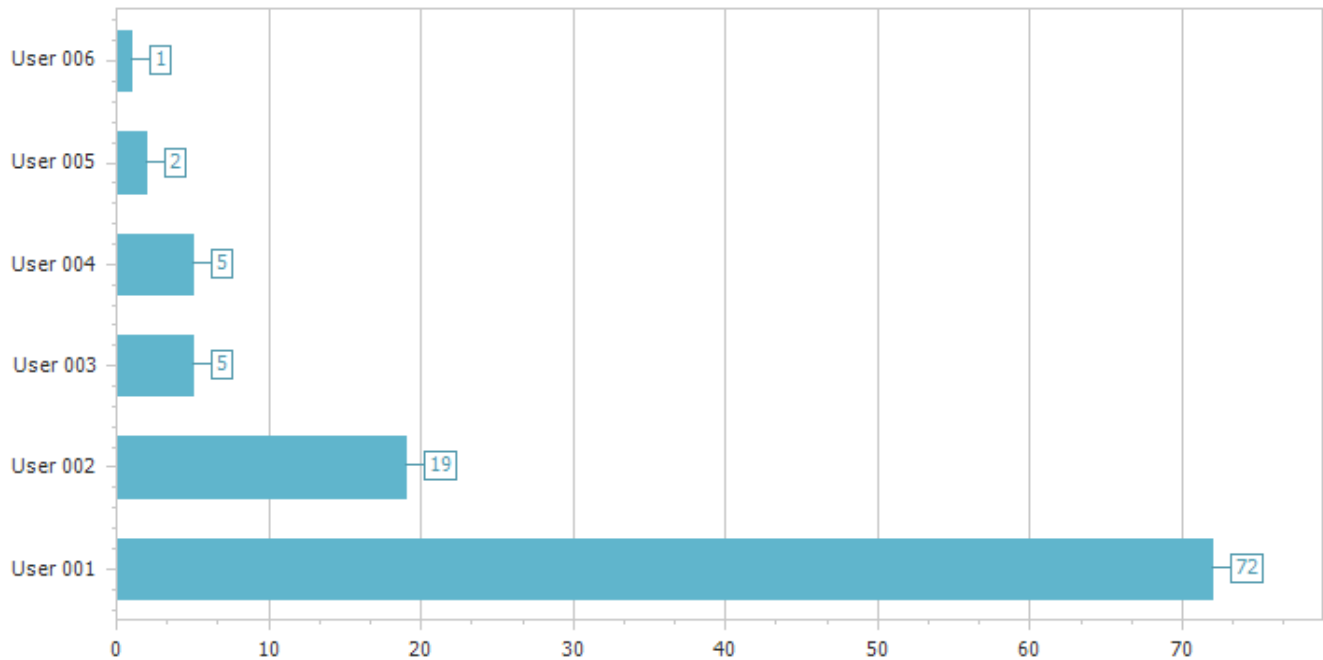


3.9 Accounts creators

Account creators (%) - Top 10

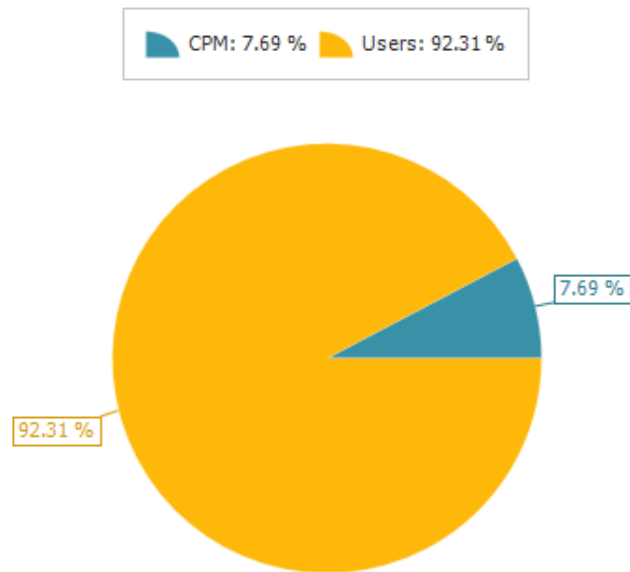


Account creators - Top 10

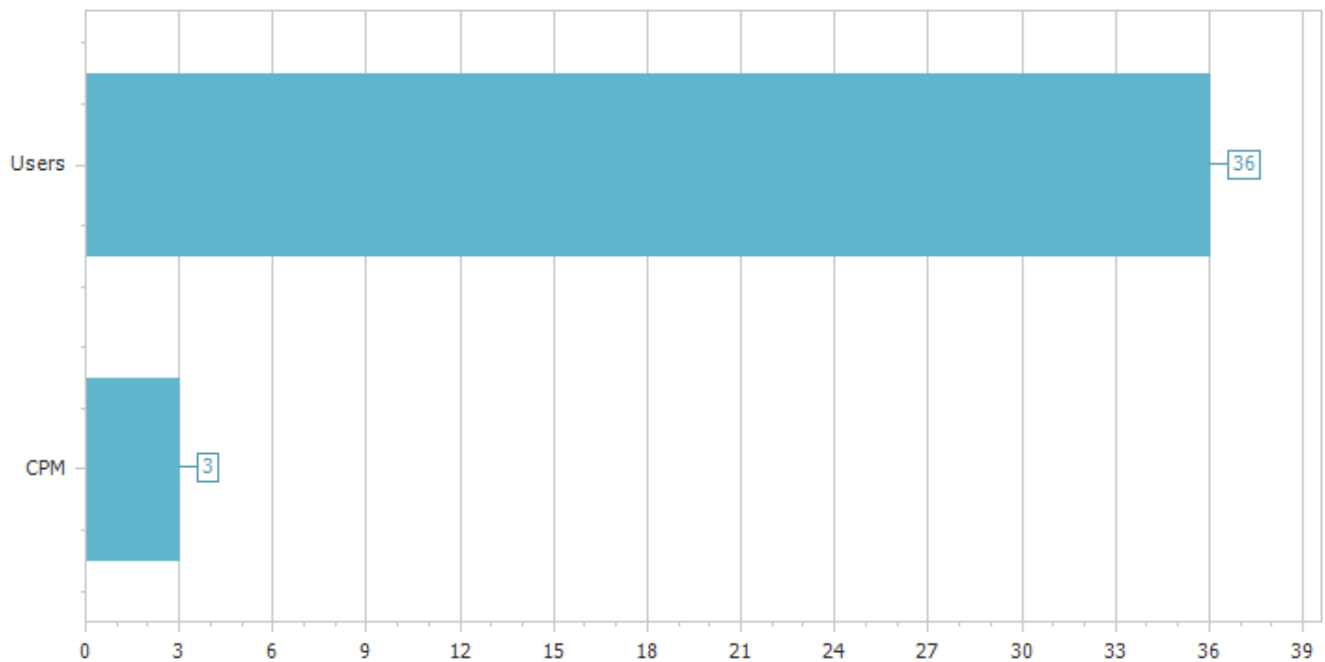


3.10 Accounts disabled by

Accounts disabled by (%)

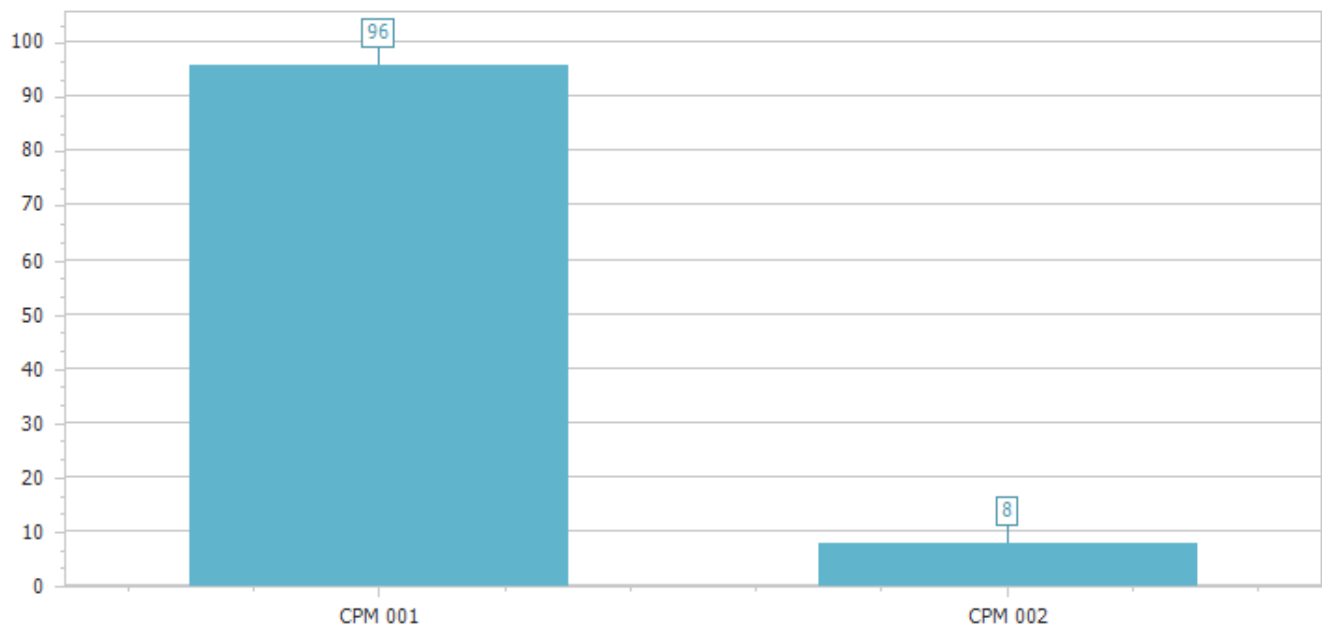


Accounts disabled by

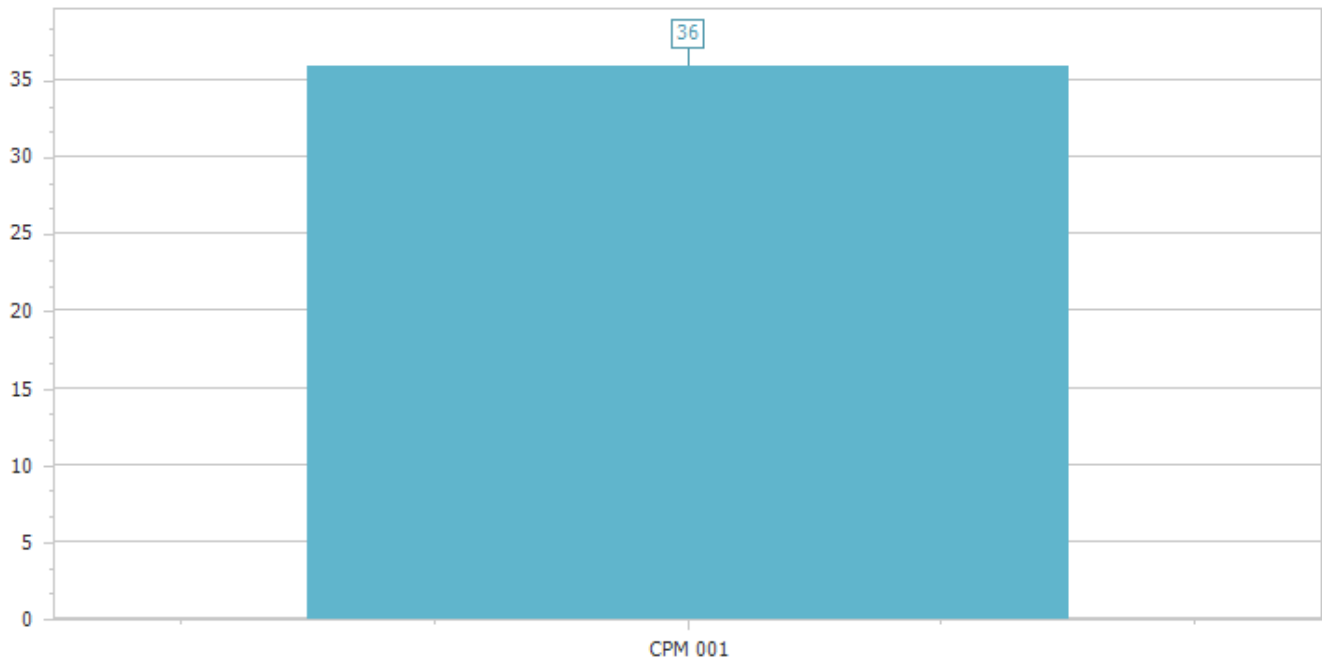


3.11 Accounts per CPM

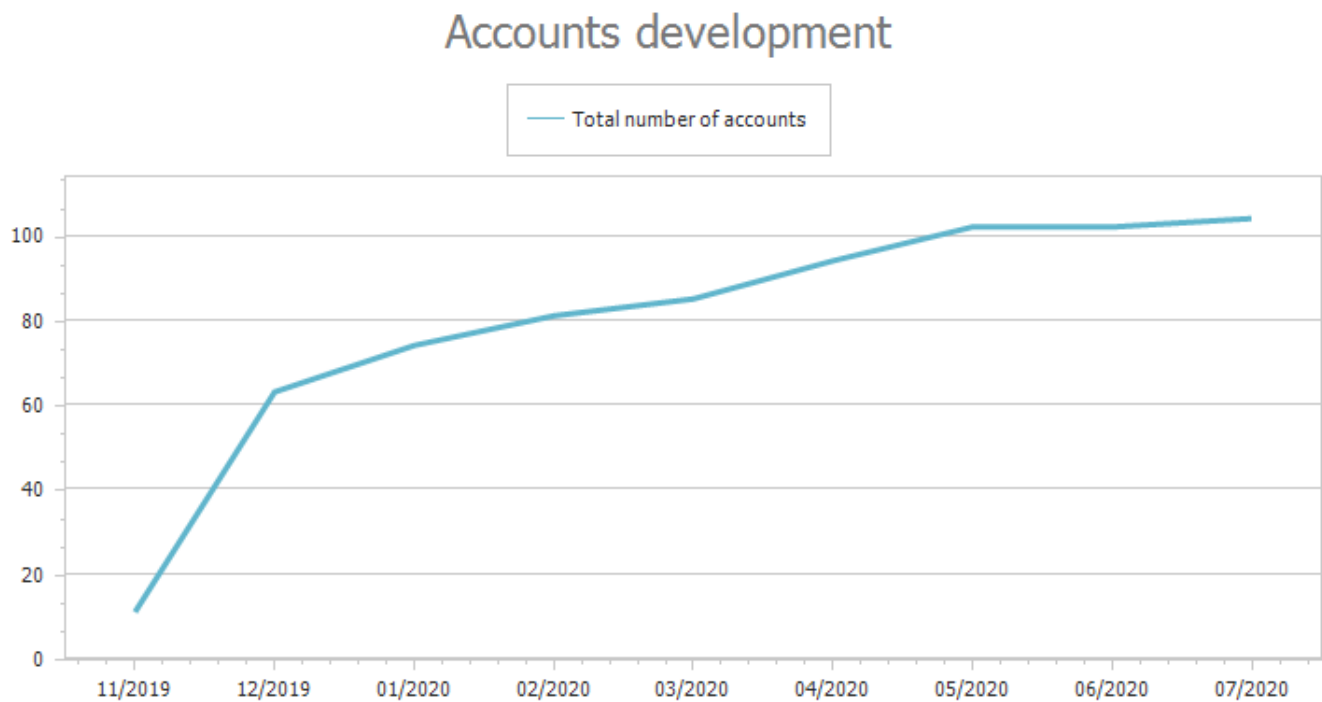
Accounts per CPM



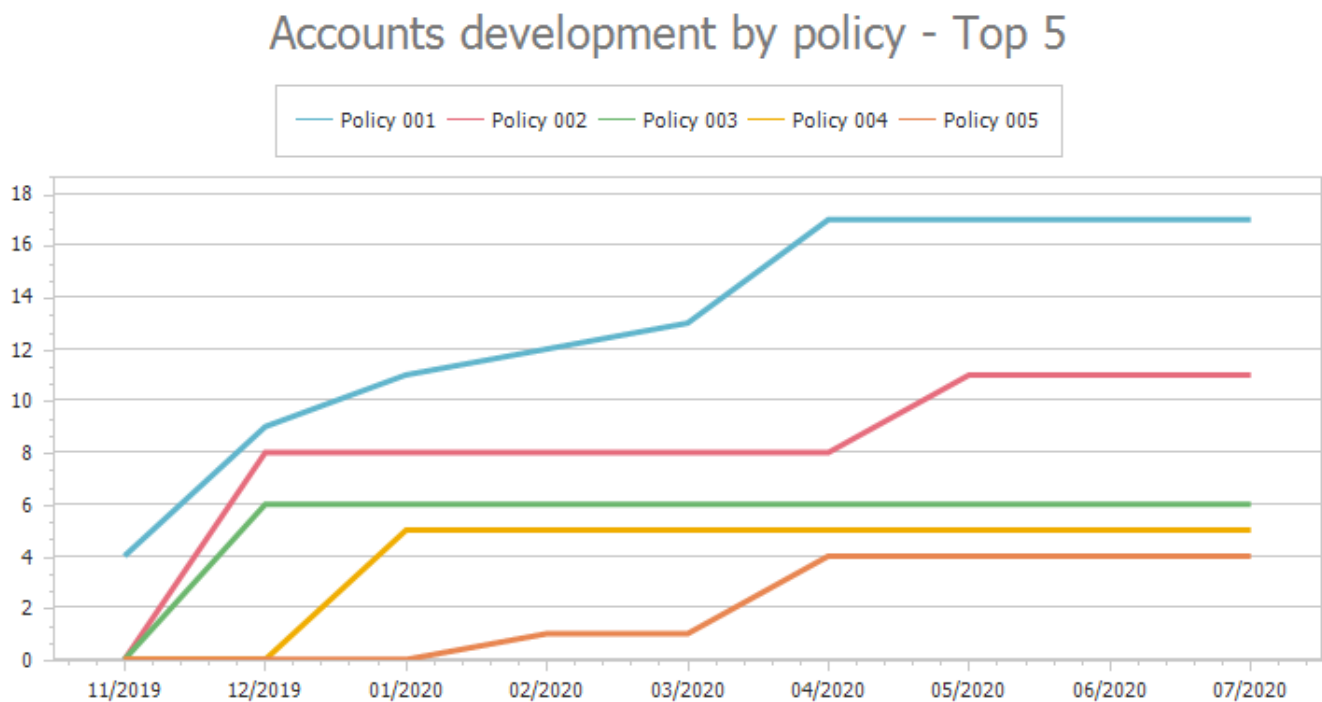
Managed accounts per CPM



3.12 Accounts development

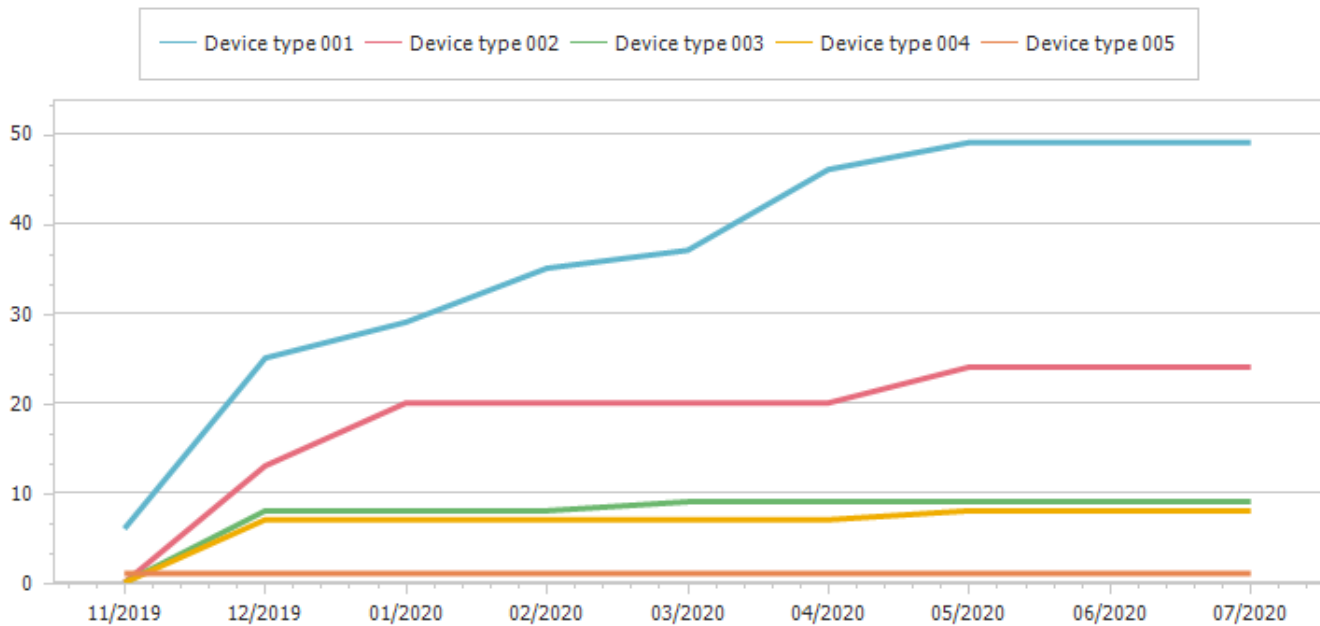


3.13 Accounts development by policy



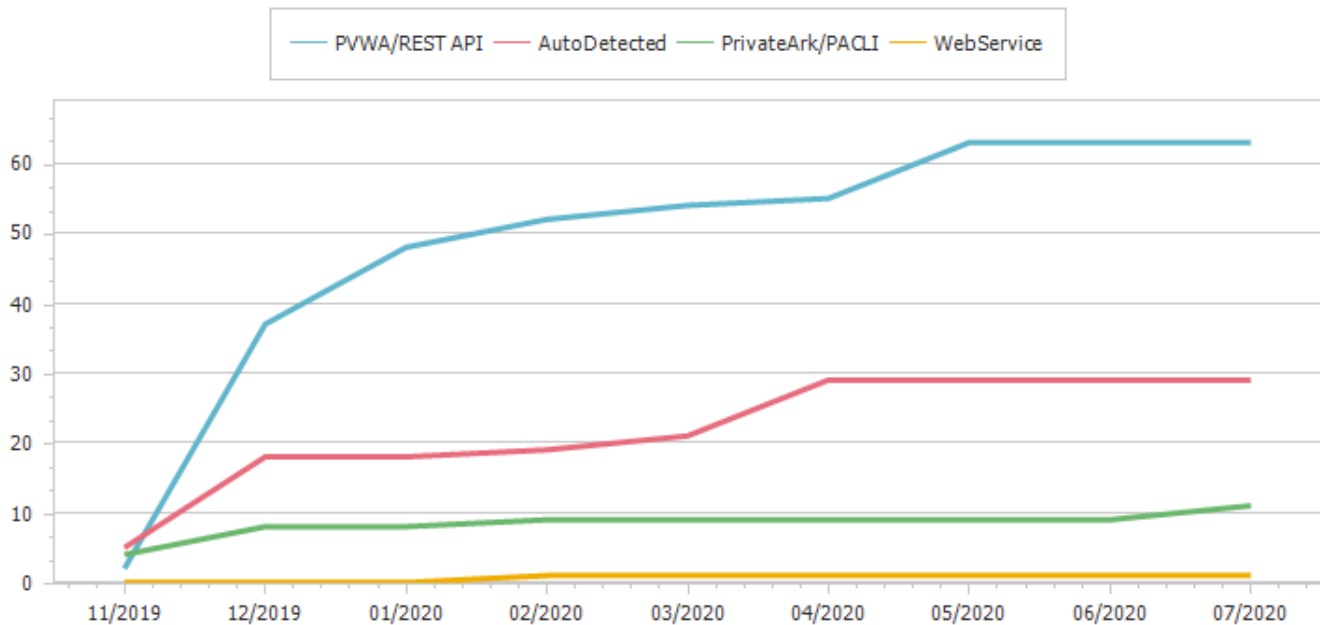
3.14 Accounts development by device type

Accounts development by device type - Top 5



3.15 Accounts development by creation method

Accounts development by creation method



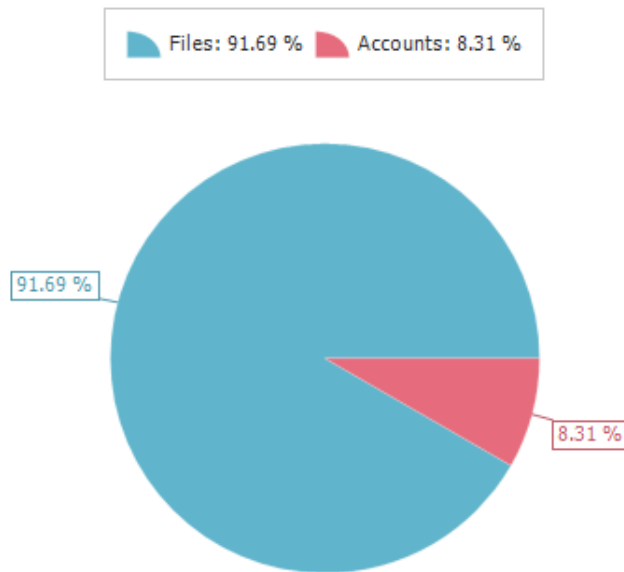
4. Safe Management

4.1 Safe statistics

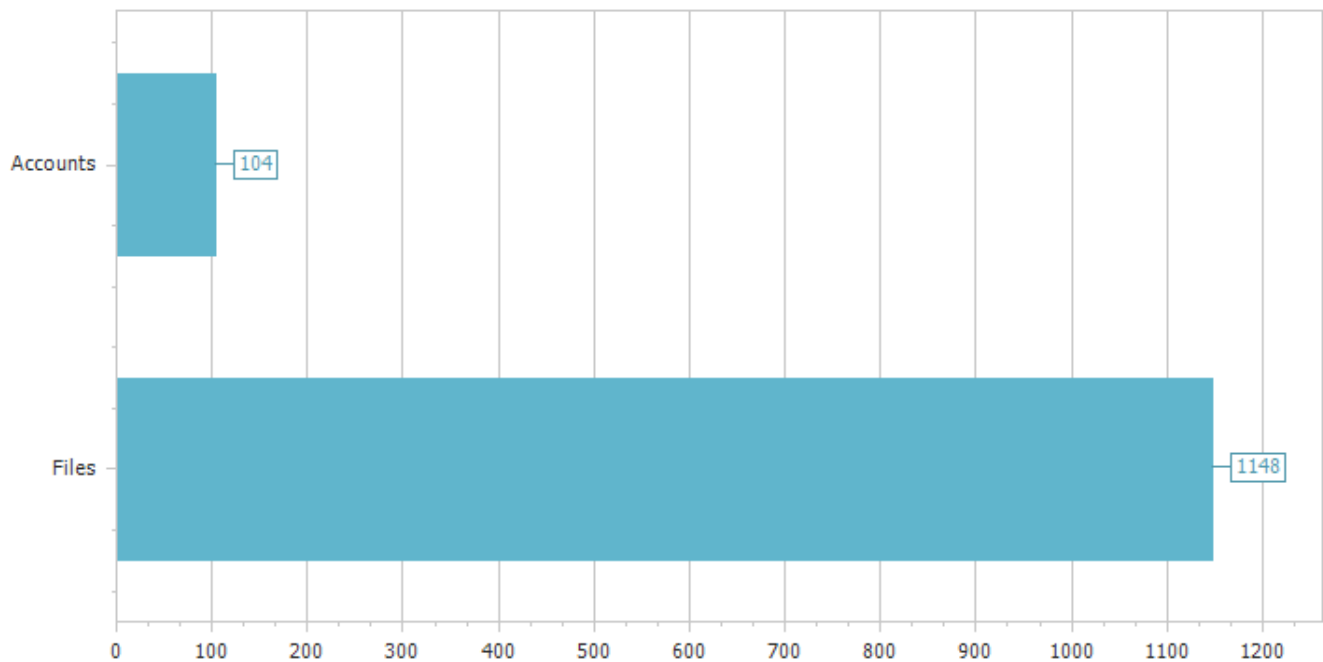
Description	Statistic	Comments
Total number of safes	65	
Total number of objects	1,721	Excluding 12 deleted objects
Recording metadata objects	457	Excluding 0 deleted recording metadata objects
Total number of files	1,148	Excluding 10 deleted files
Total number of accounts	104	Excluding 12 temporary CPM account objects and 0 Ad-Hoc connection account objects
Average objects per safe	26	rounded to whole number
Average accounts per safe	1	rounded to whole number
Average files per safe	17	rounded to whole number
Total size of all objects	0.73 GB (0.41%)	
Average safe used size:	0.01 GB	
Total max size of all safes:	179.12 GB	
Average safe max size:	2.76 GB	
Total free safe space:	178.39 GB (99.59%)	
Average free safe space:	2.74 GB	
Average safes creation:	7 safes (per month)	
Average objects creation:	192 objects (per month)	
Average files creation:	128 files (per month)	
Average data creation:	0.08 GB (per month)	

4.2 Objects in Vault

Objects in Vault (%)

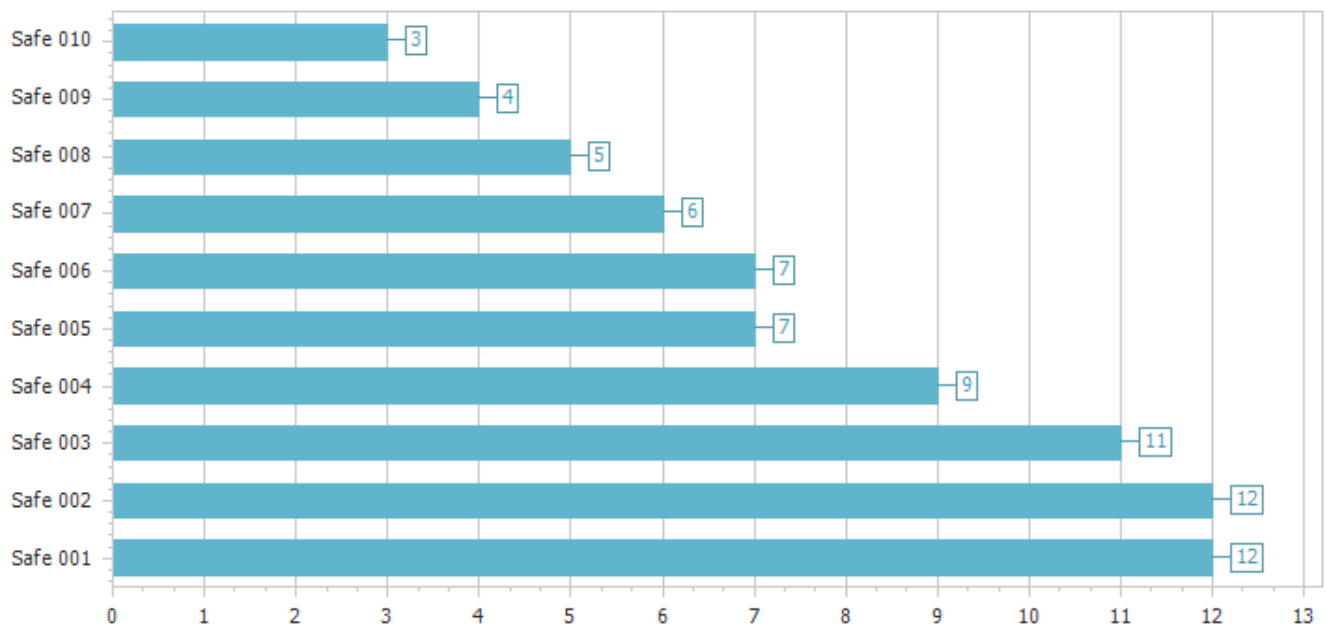


Objects in Vault

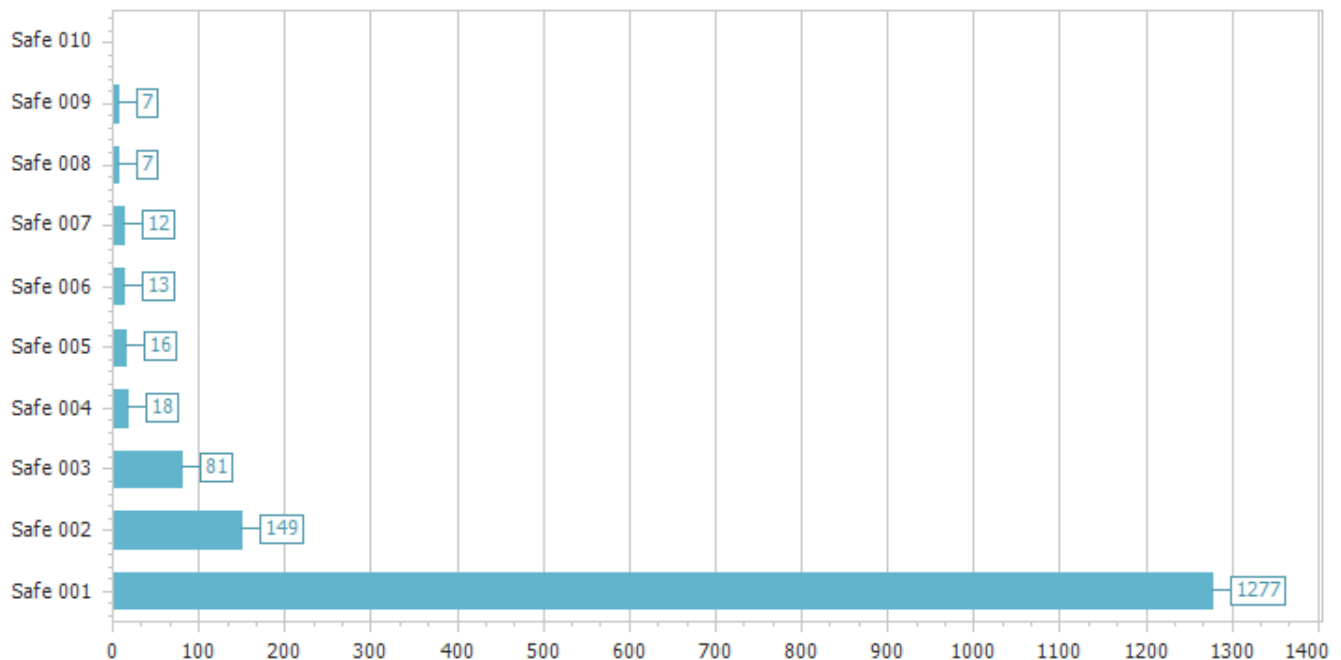


4.3 Objects per safe

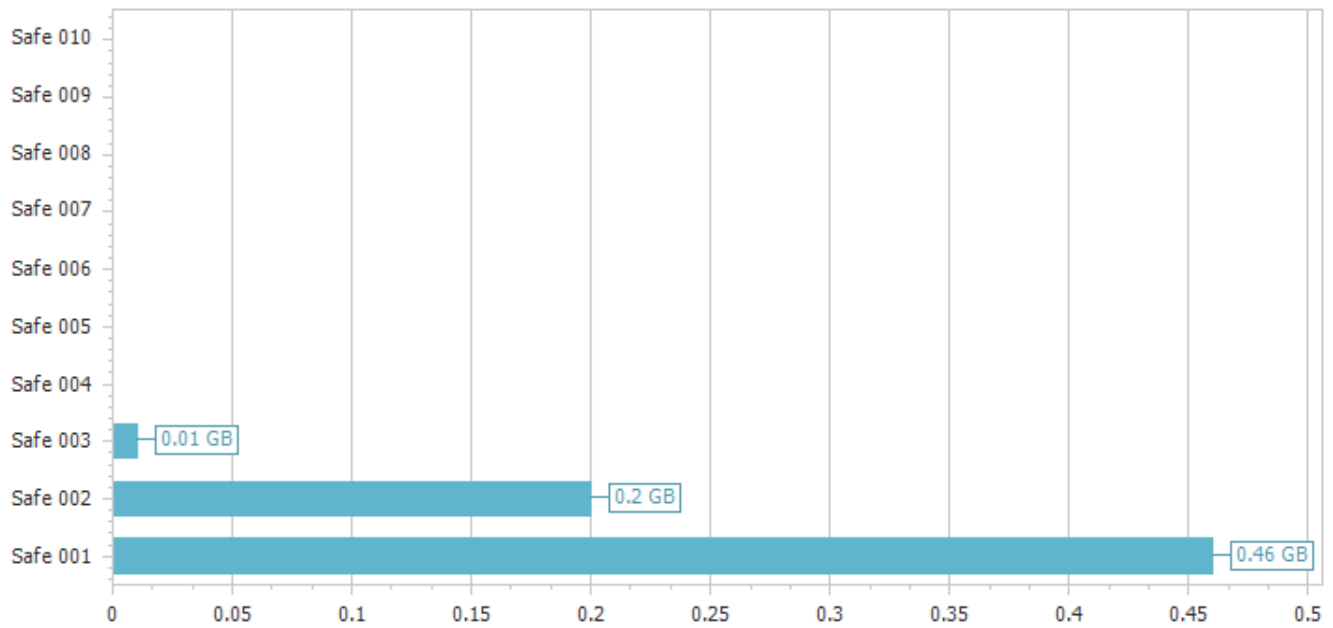
Accounts per safe (excluding deleted accounts) - Top 10



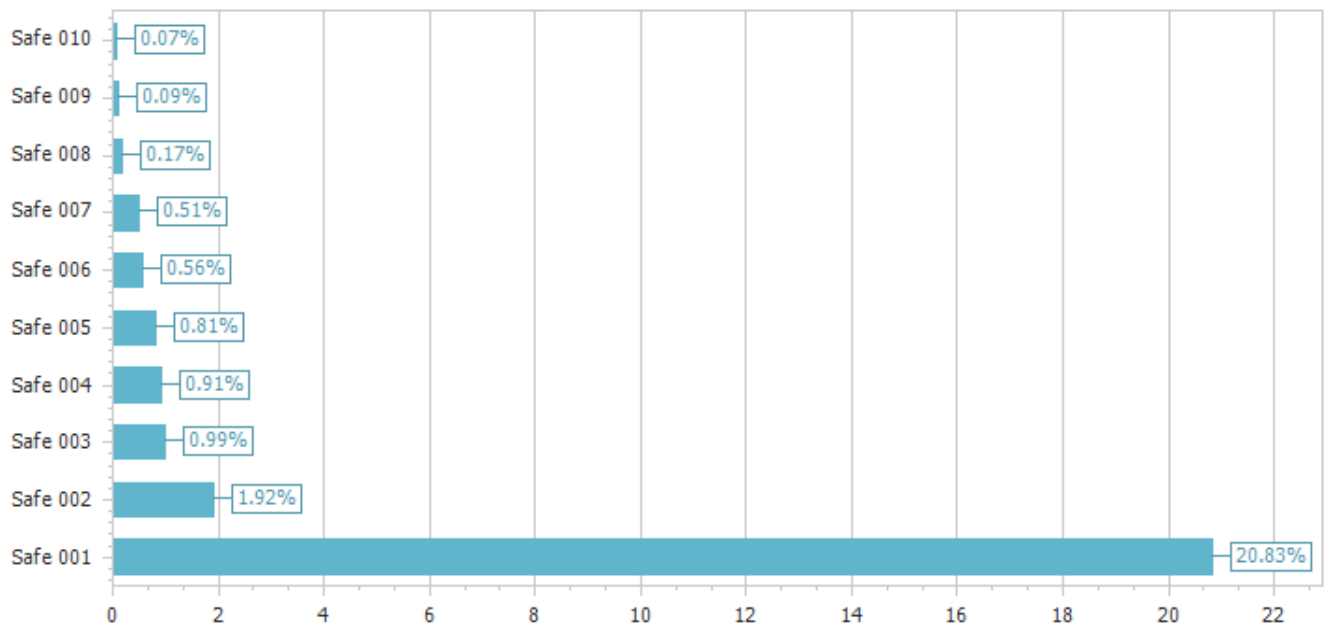
Files per safe (excluding deleted files) - Top 10



Safes by used size (GB) - Top 10

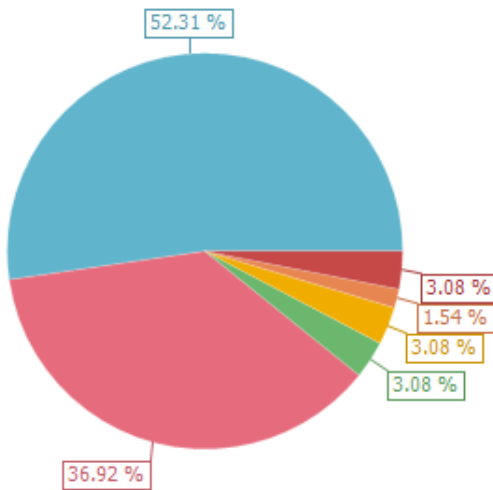
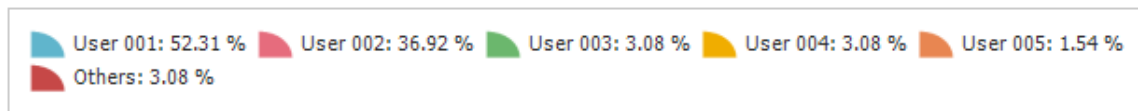
4.4 Safes by used size

Safes by used size (%) - Top 10

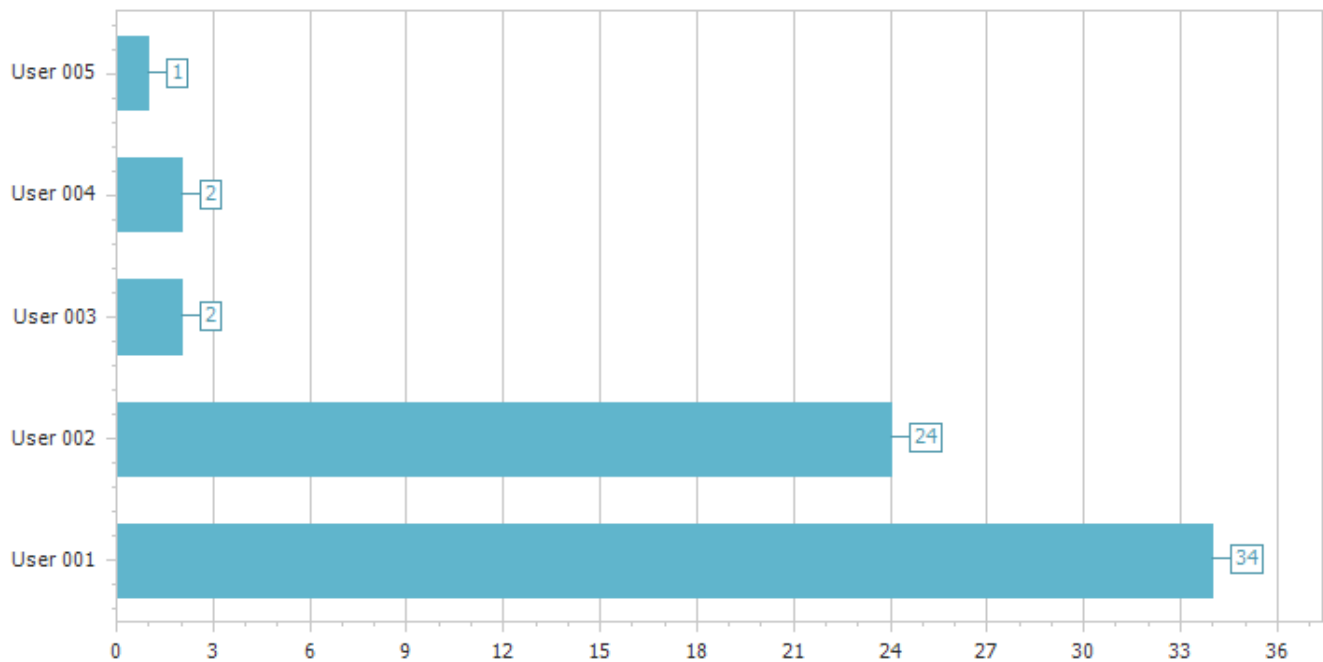


4.5 Safe creators

Safes creators (%) - Top 5

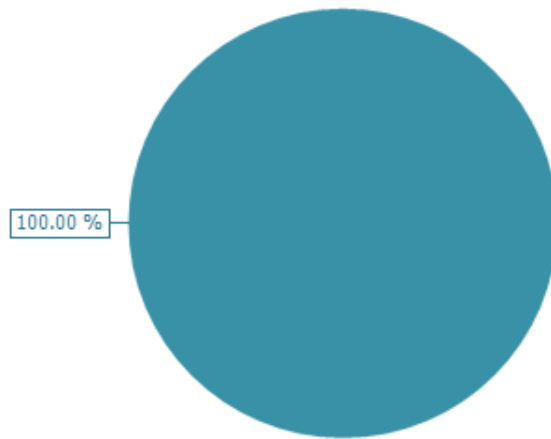
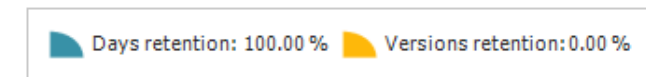


Safes creators - Top 5

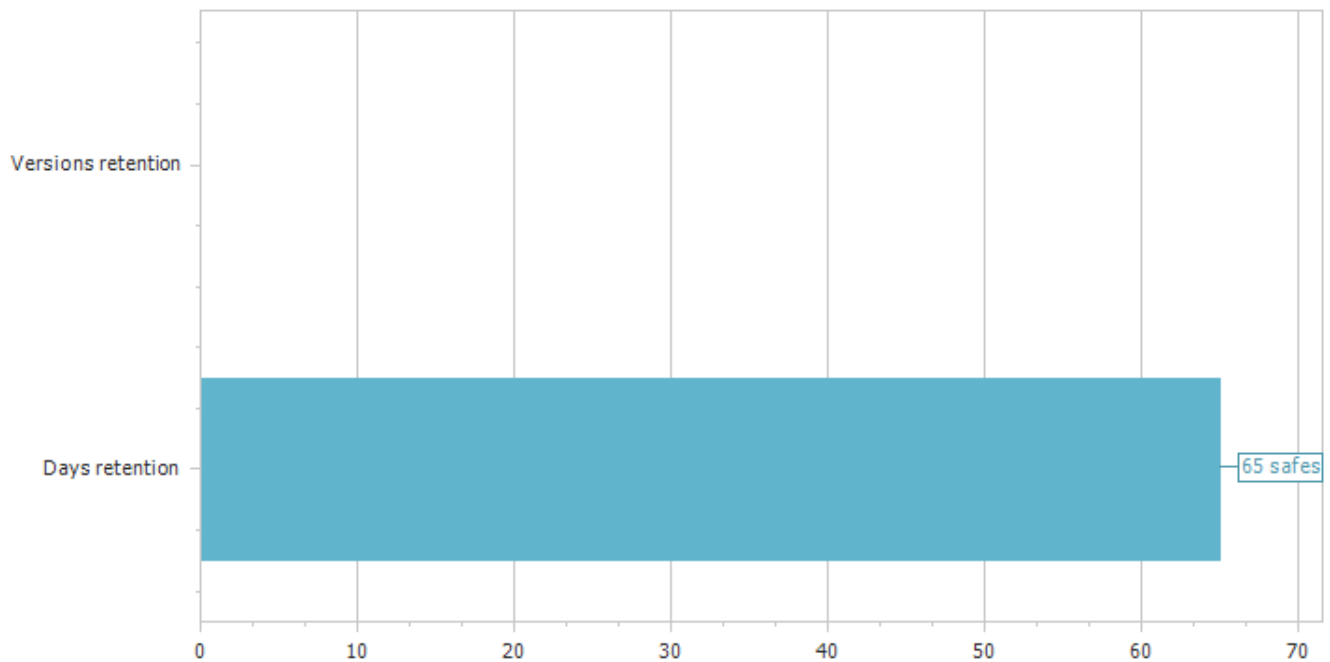


4.6 Safes by retention type

Safes by retention type (%)

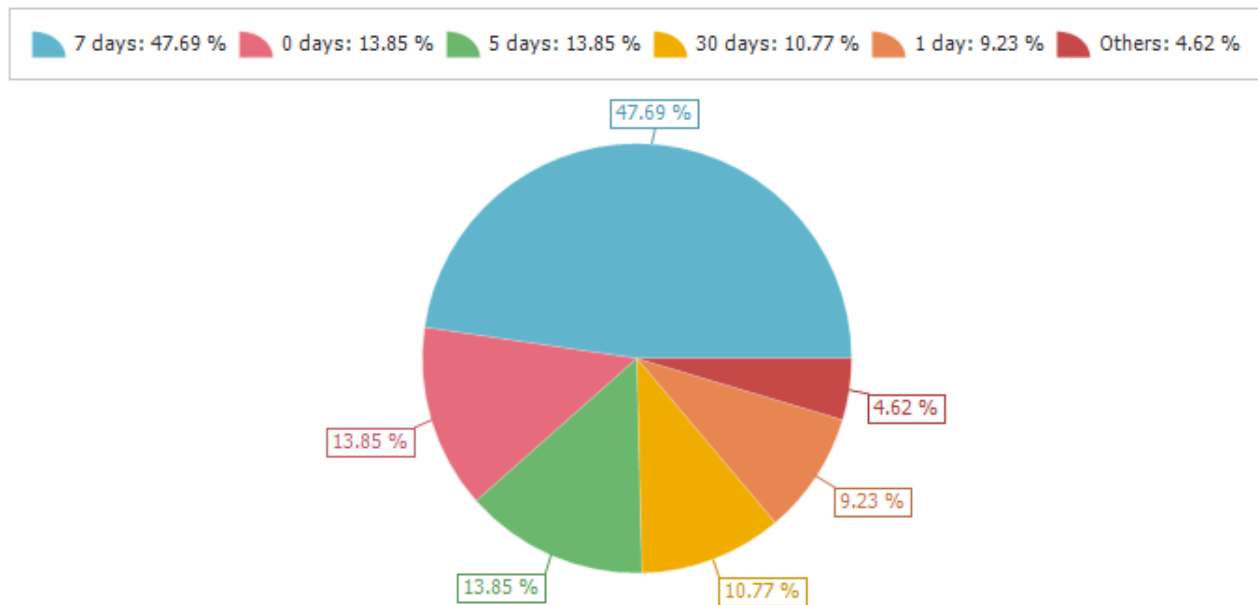


Safes by retention type

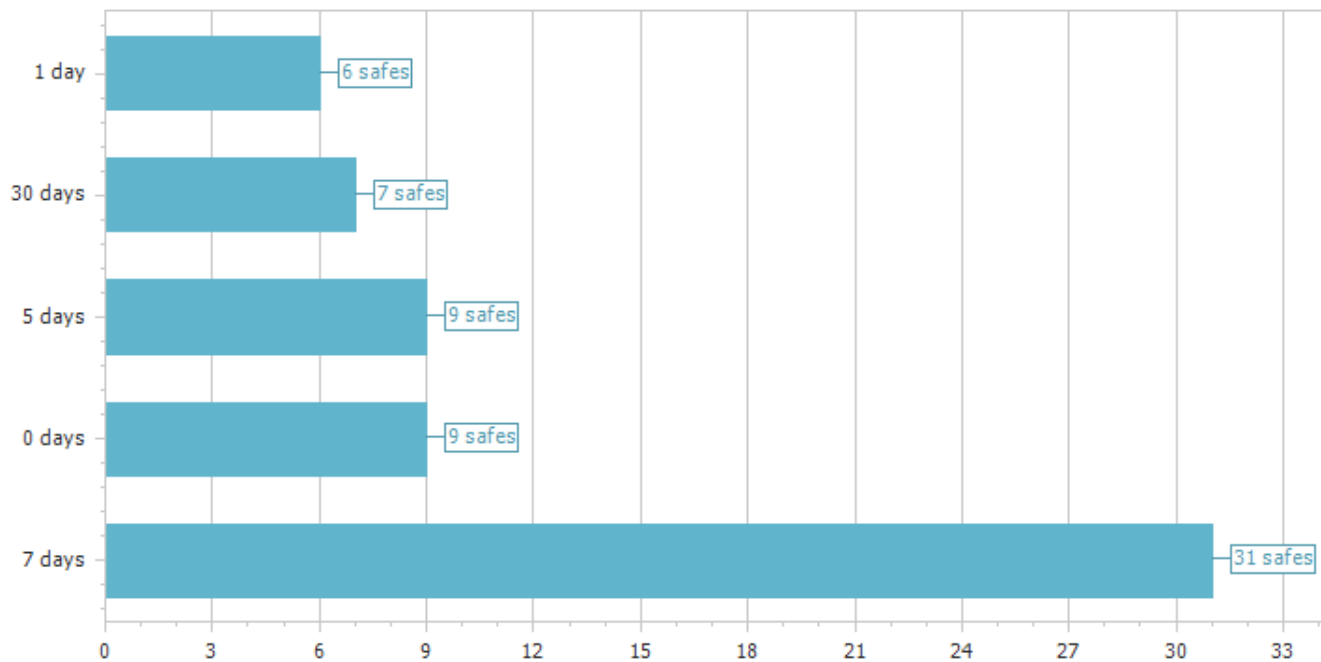


4.7 Most used retention settings

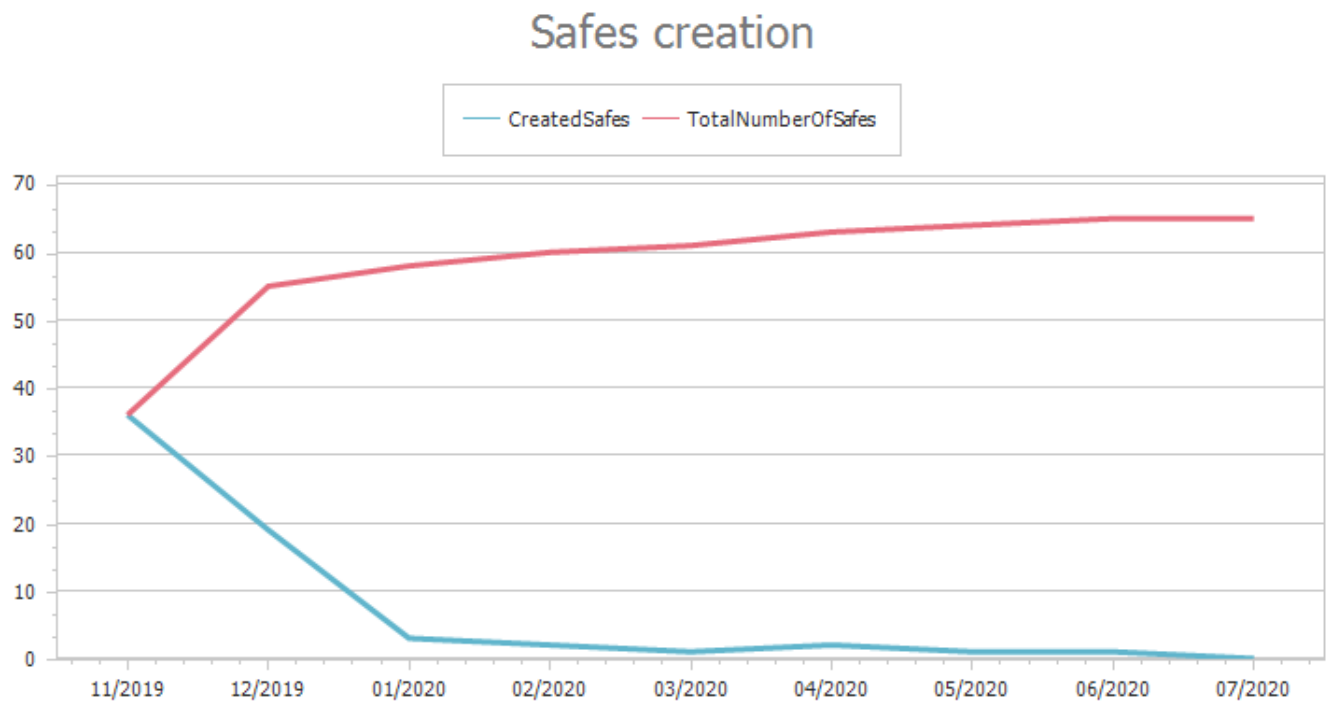
Most used retention settings (%) - Top 5



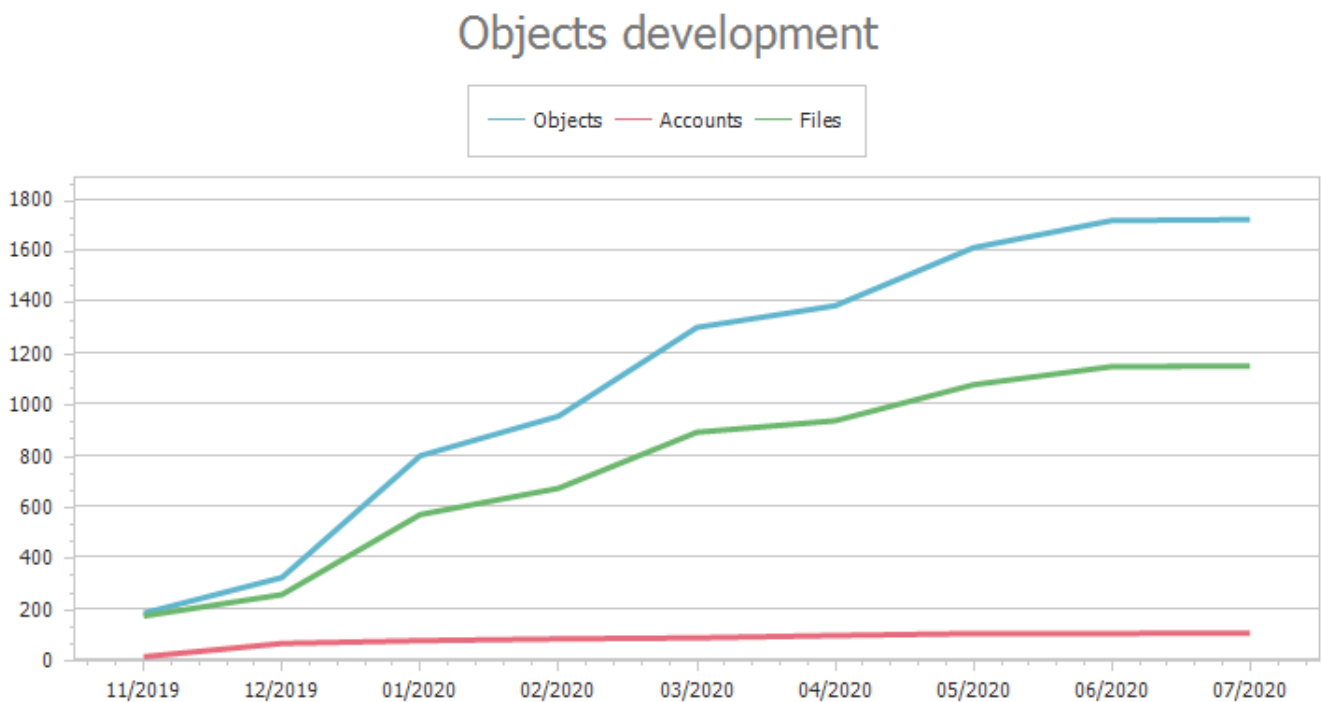
Most used retention settings - Top 5



4.8 Safes creation

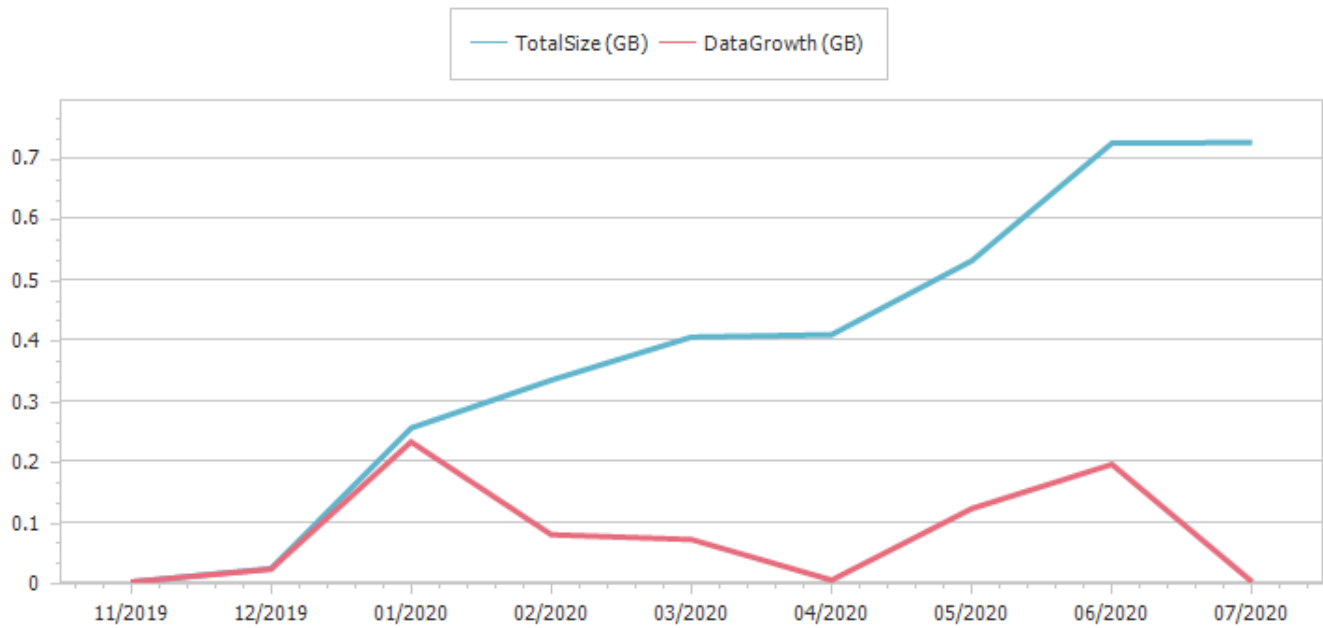


4.9 Objects development



4.10 Data development

Total size of all objects (GB)



5. Session Management

5.1 Session statistics

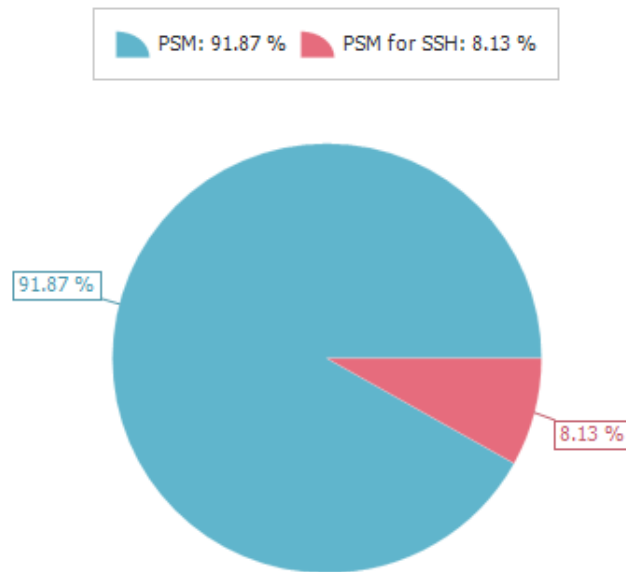
Description	Statistic	Comments
Total number of sessions	123	Within the last 104 days
PSM sessions	113	91.87% of all sessions
PSM for SSH sessions	10	8.13% of all sessions
Average sessions per day	1	Rounded to whole number
PSM average sessions per day	1	Rounded to whole number
PSM for SSH average sessions per day	0	Rounded to whole number
Maximum sessions per day	38	
PSM maximum sessions per day	38	
PSM for SSH maximum sessions per day	2	
Average session duration	00:50:35	
PSM average session duration	00:41:25	
PSM for SSH average session duration	02:34:12	
Maximum concurrent sessions	4	
PSM maximum concurrent sessions	4	
PSM for SSH maximum concurrent sessions	1	
Maximum concurrent OPM sessions	1	
Total distinct target systems	43	Based on session audit and session recordings information
PSM distinct target systems	43	Based on session audit and session recordings information
PSM for SSH distinct target systems	1	Based on session audit and session recordings information
Total distinct target accounts	37	
PSM distinct target accounts	35	
PSM for SSH distinct target accounts	3	
Total distinct CyberArk users	5	
PSM distinct CyberArk users	5	
PSM for SSH distinct CyberArk users	1	
Recorded sessions	424	
Recorded PSM sessions	404	
Recorded PSM for SSH sessions	20	
Recorded OPM sessions	2	
Average recording duration	00:35:56	
Average PSM recording duration	00:27:42	
Average PSM for SSH recording duration	03:22:04	
Average recording size / minute	0.0307 MB	
Average PSM recording size / minute	0.0417 MB	
Average PSM for SSH recording size / minute	0 MB	
Recording files	822	
OPM recording files	2	

PAS Environment Report (highly obfuscated)

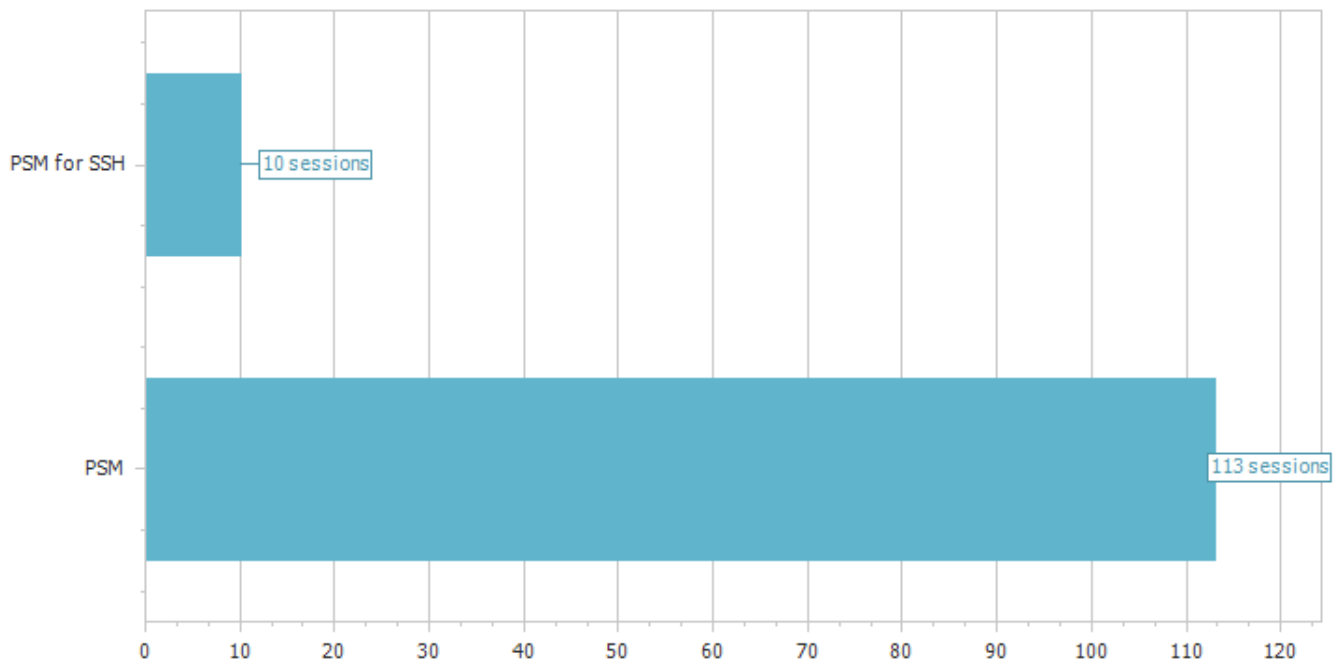
PSM recording files	800	
PSM for SSH recording files	20	
Size of all recordings	0.46 GB	
PSM recordings size	0.46 GB	
PSM for SSH recordings size	0 GB	
OPM recordings size	0 GB	
Average recording size	1.102 MB	
Average PSM recording size	1.156 MB	
Average PSM for SSH recording size	0.003 MB	
Average OPM recording size	0.003 MB	
Safes with recordings	2	

5.2 Sessions by PSM solution

Sessions by PSM solution (%)

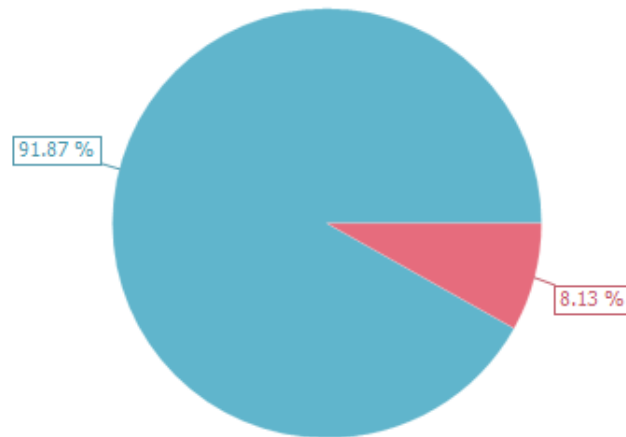
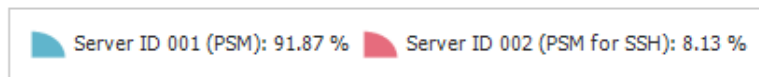


Sessions by PSM solution

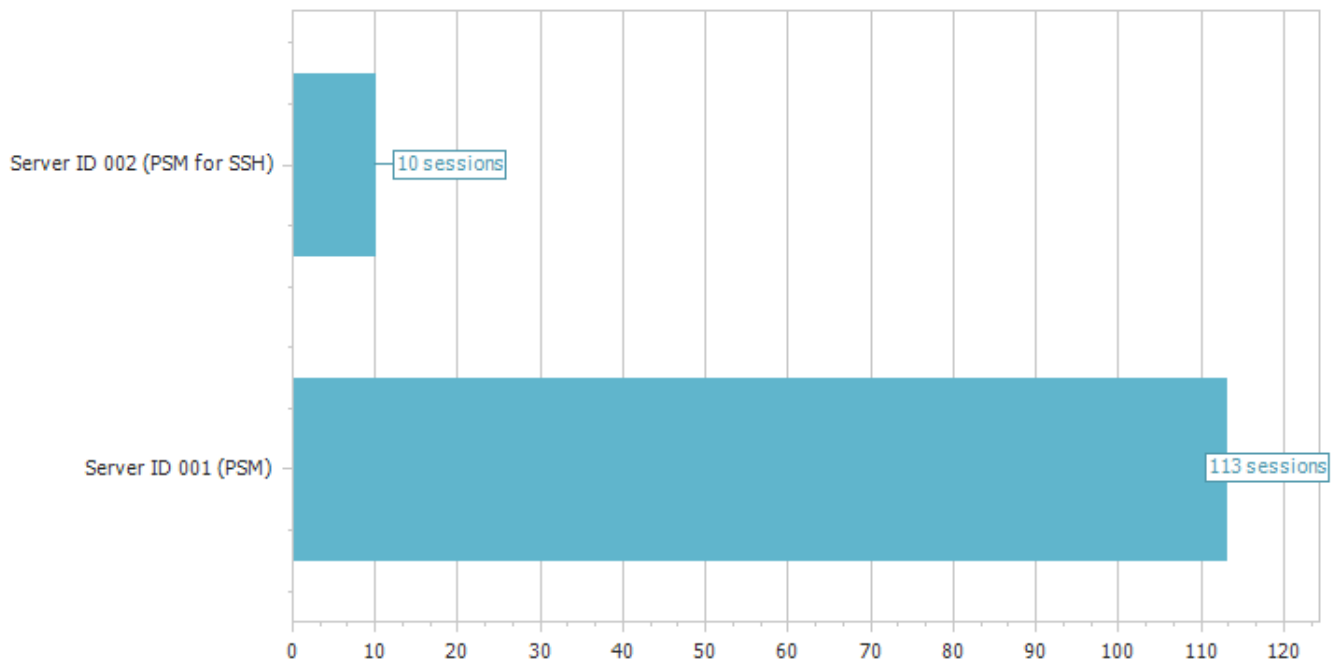


5.3 Sessions by PSM solution server ID

Sessions by PSM solution server ID (%)

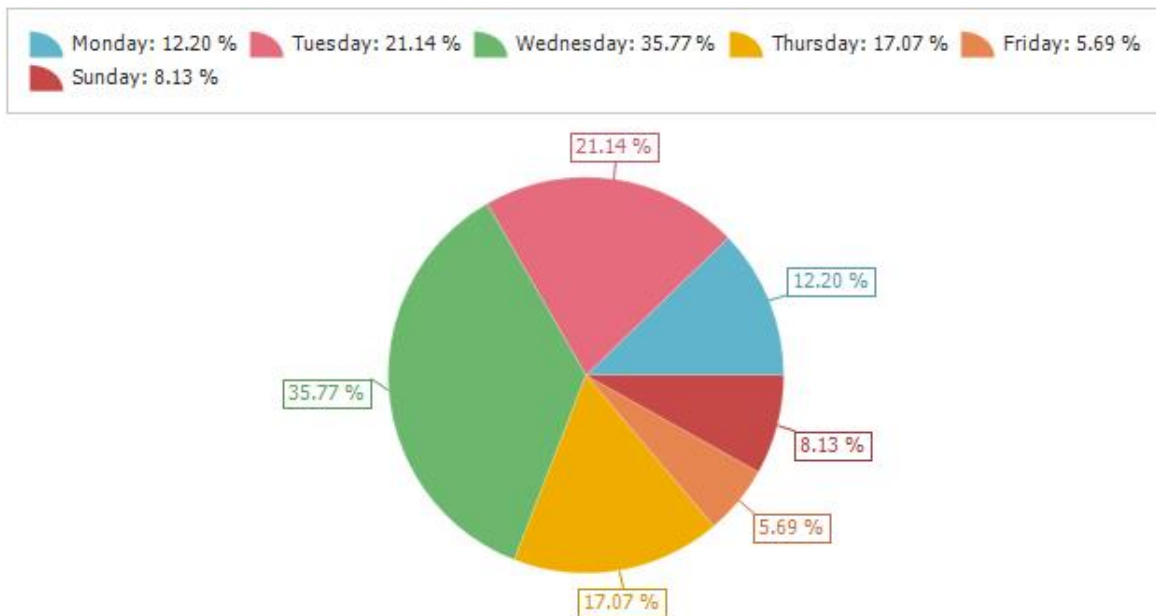


Sessions by PSM solution server ID

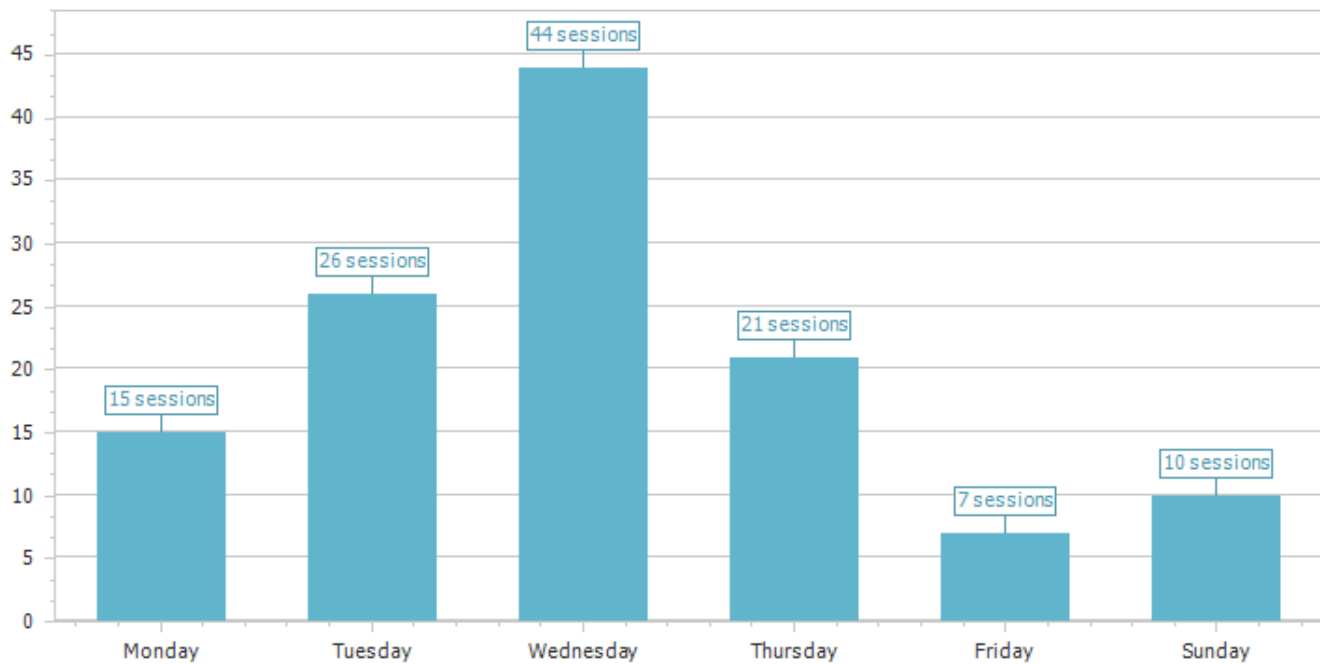


5.4 Sessions by weekday

Sessions by weekday (%)

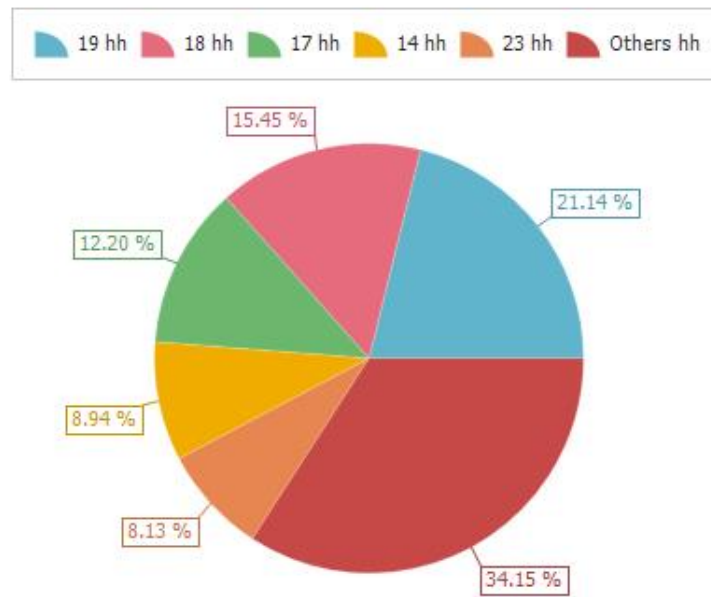


Sessions by weekday

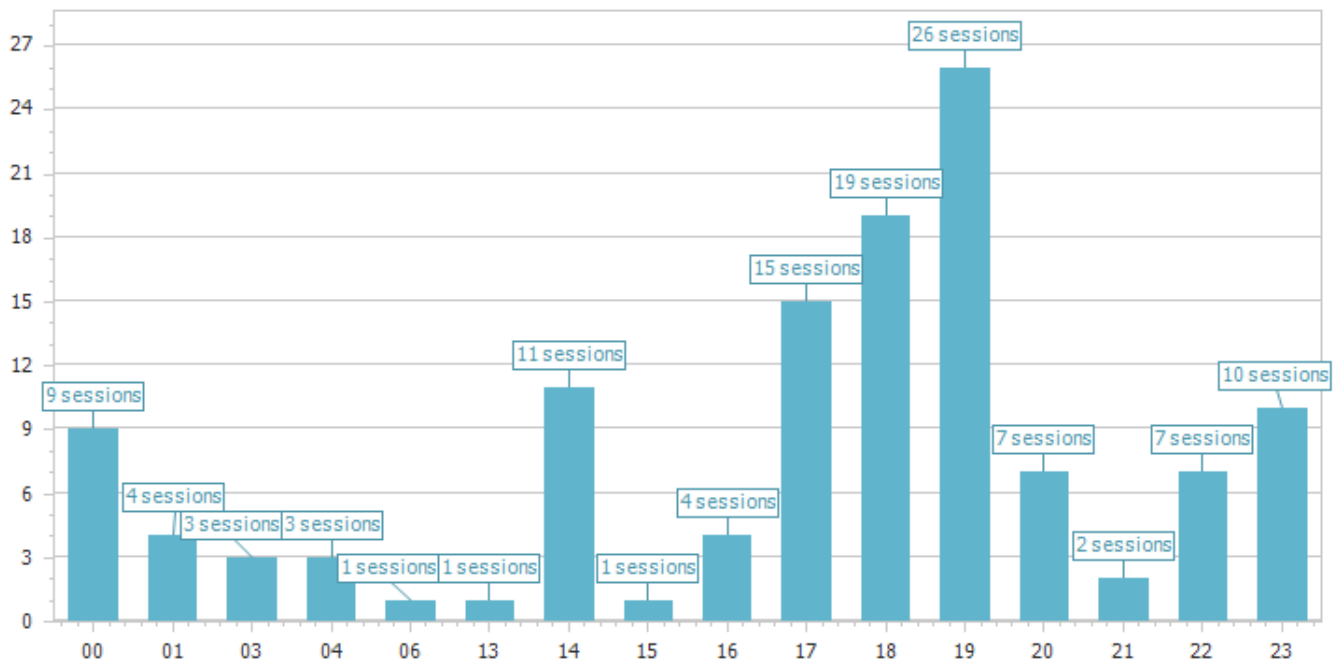


5.5 Sessions by daytime hour

Sessions by daytime hour (%) - Top 5

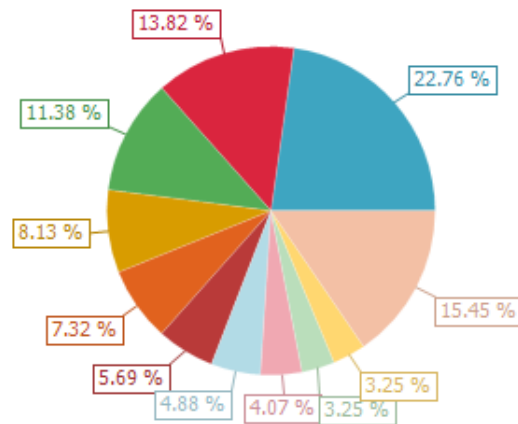
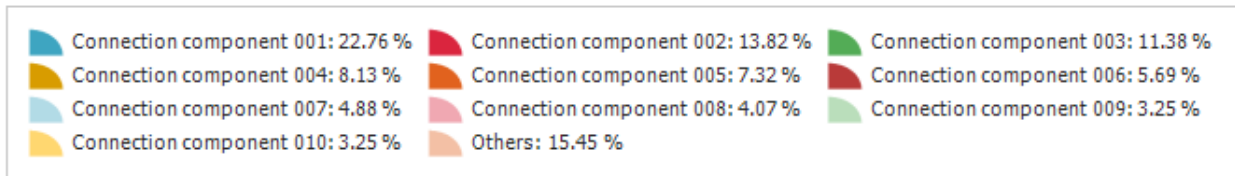


Sessions by daytime hour

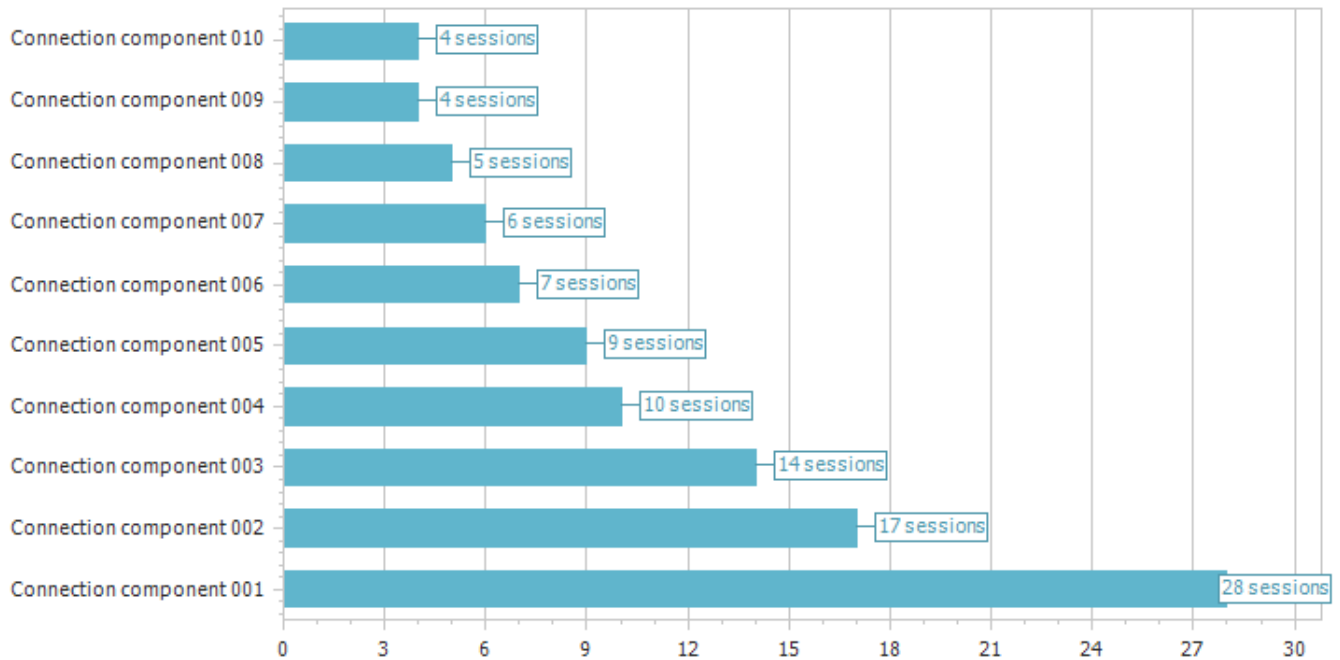


5.6 Sessions by connection component

Sessions by connection component (%) - Top 10

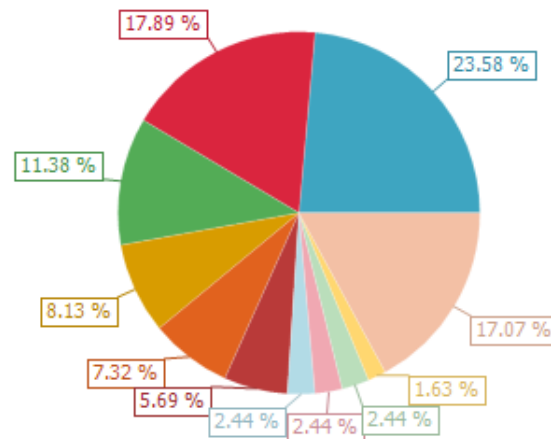
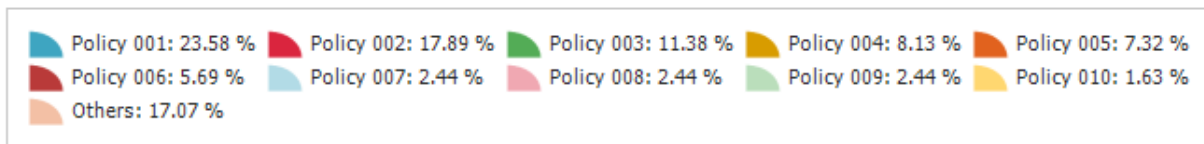


Sessions by connection component - Top 10

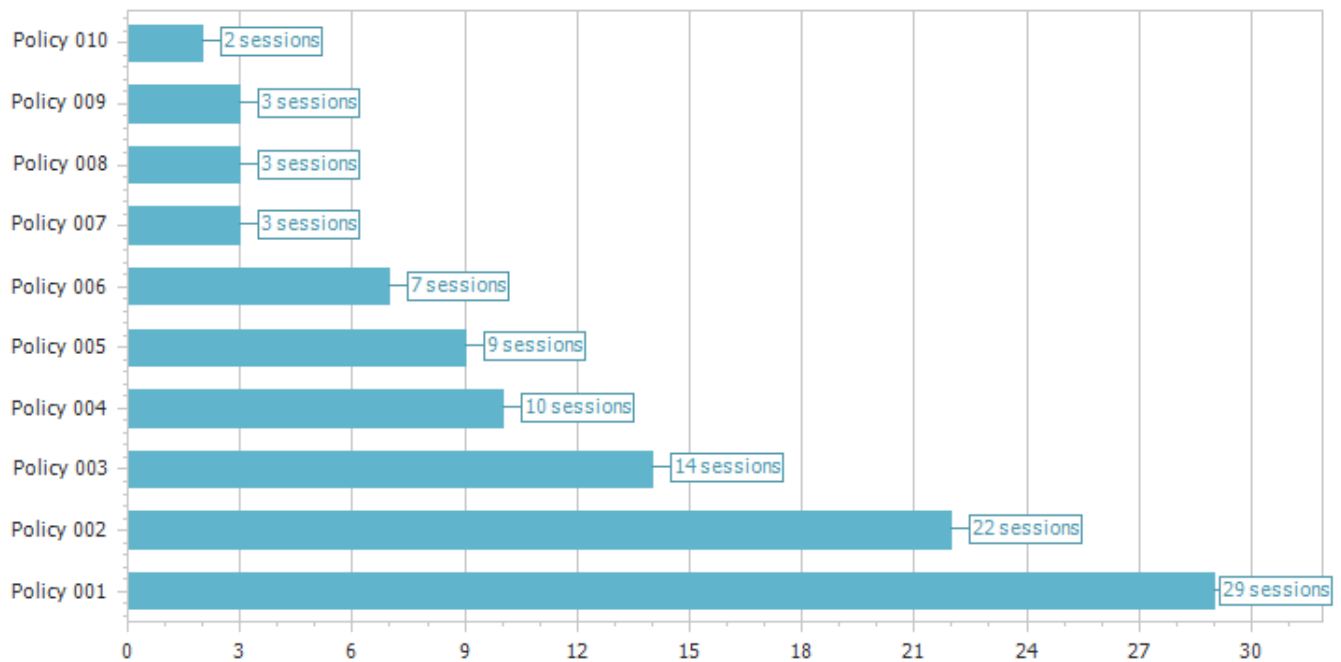


5.7 Sessions by policy

Sessions by policy (%) - Top 10

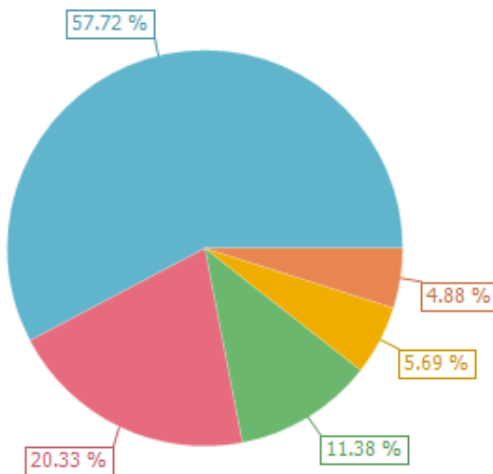
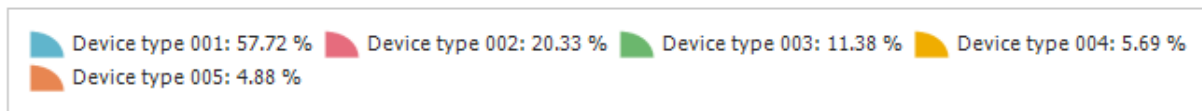


Sessions by policy - Top 10

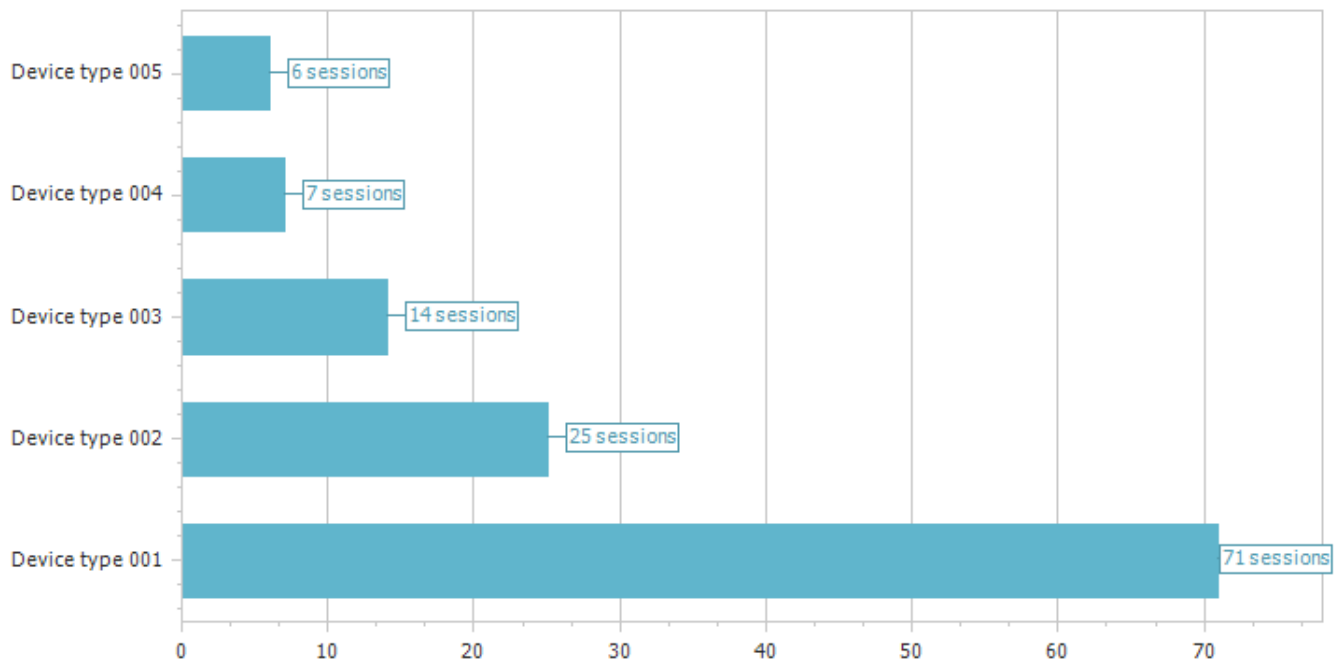


5.8 Sessions by device type

Sessions by device type (%) - Top 10

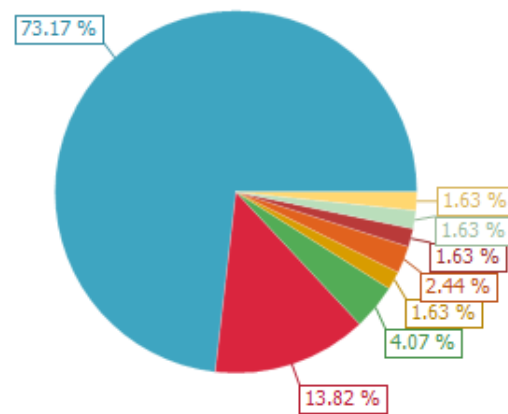
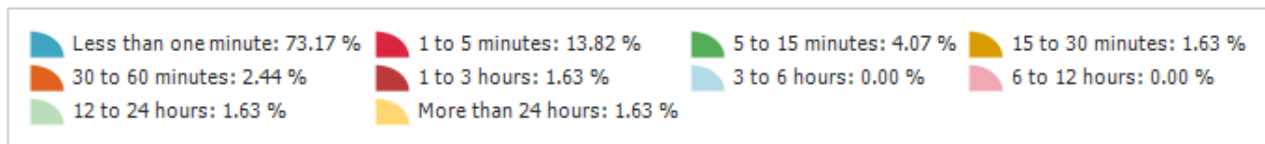


Sessions by device type - Top 10

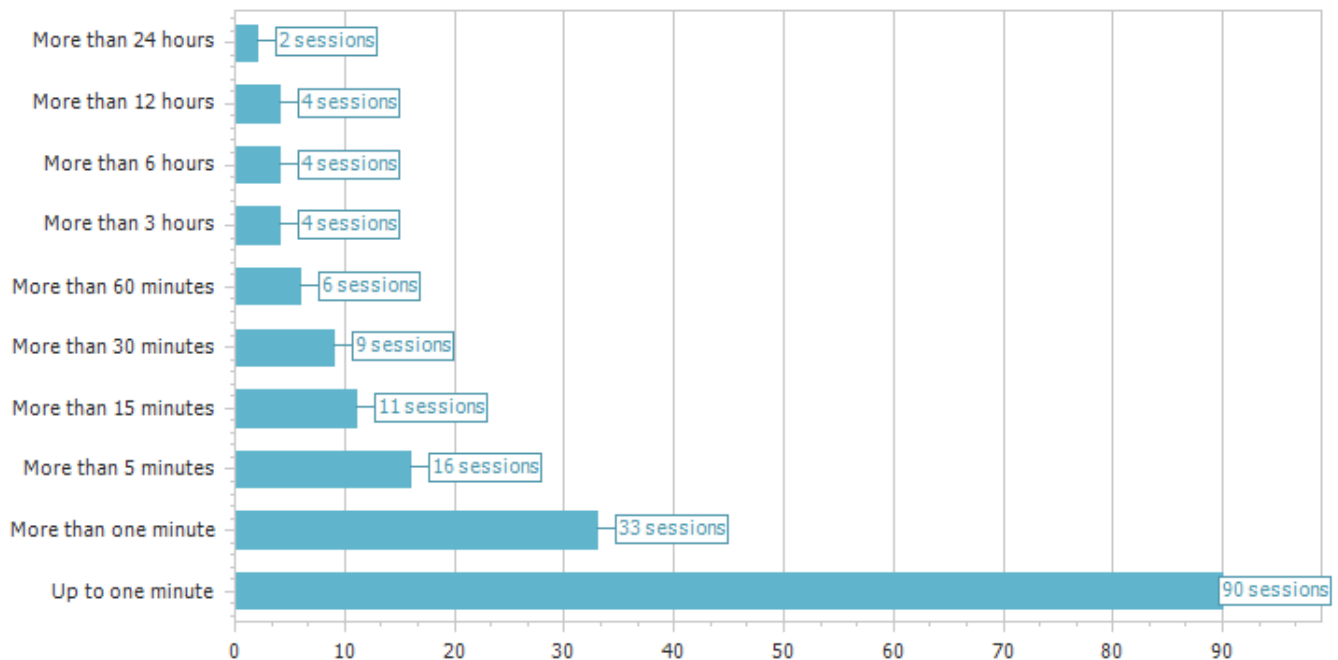


5.9 Sessions by session duration

Sessions by session duration (%)

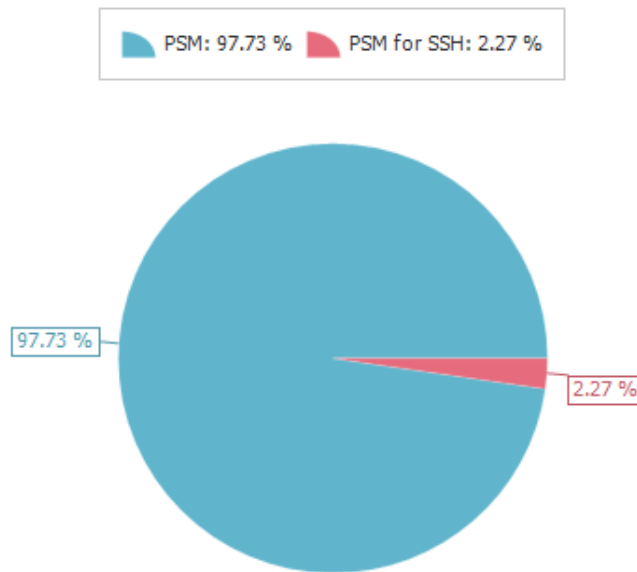


Sessions by session duration

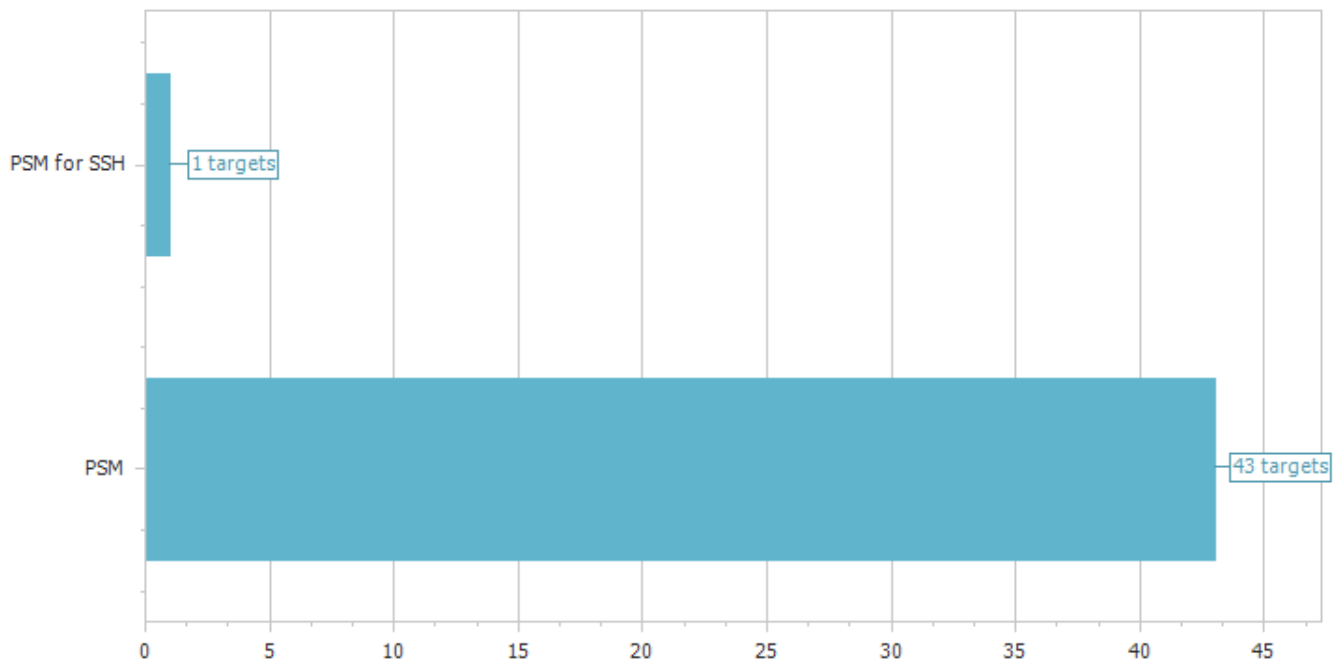


5.10 Target systems by PSM solution

Target systems by PSM solution (%)

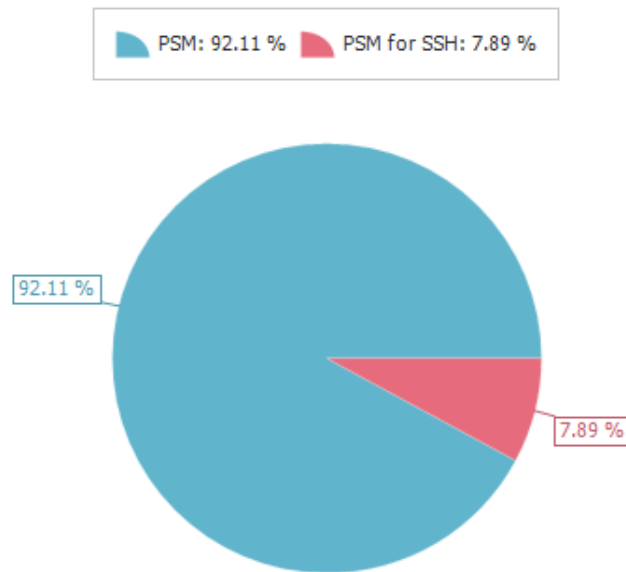


Target systems by PSM solution

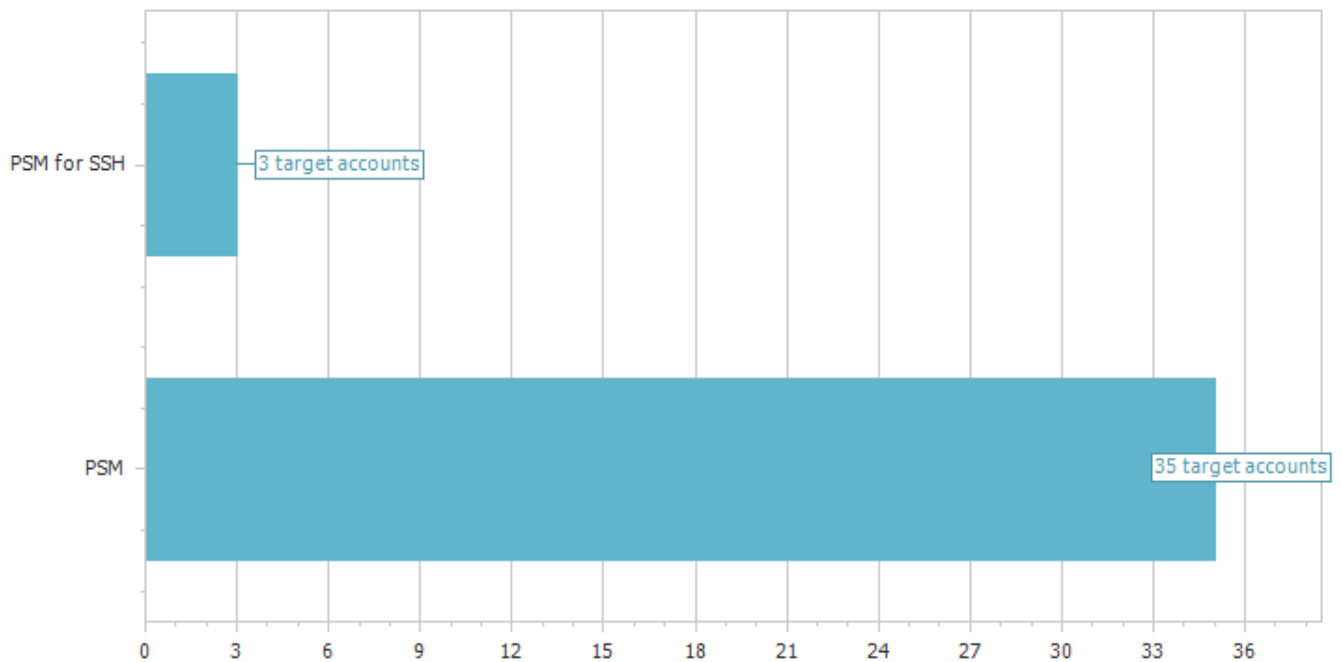


5.11 Target accounts by PSM solution

Target accounts by PSM solution (%)

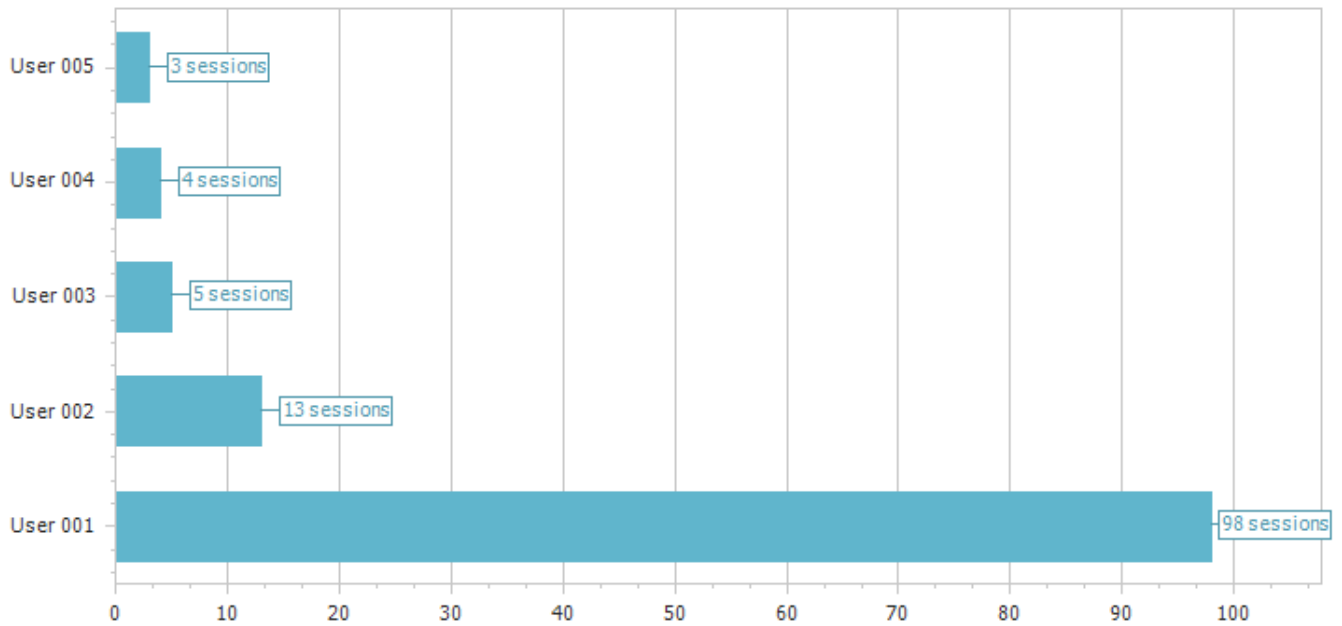


Target accounts by PSM solution



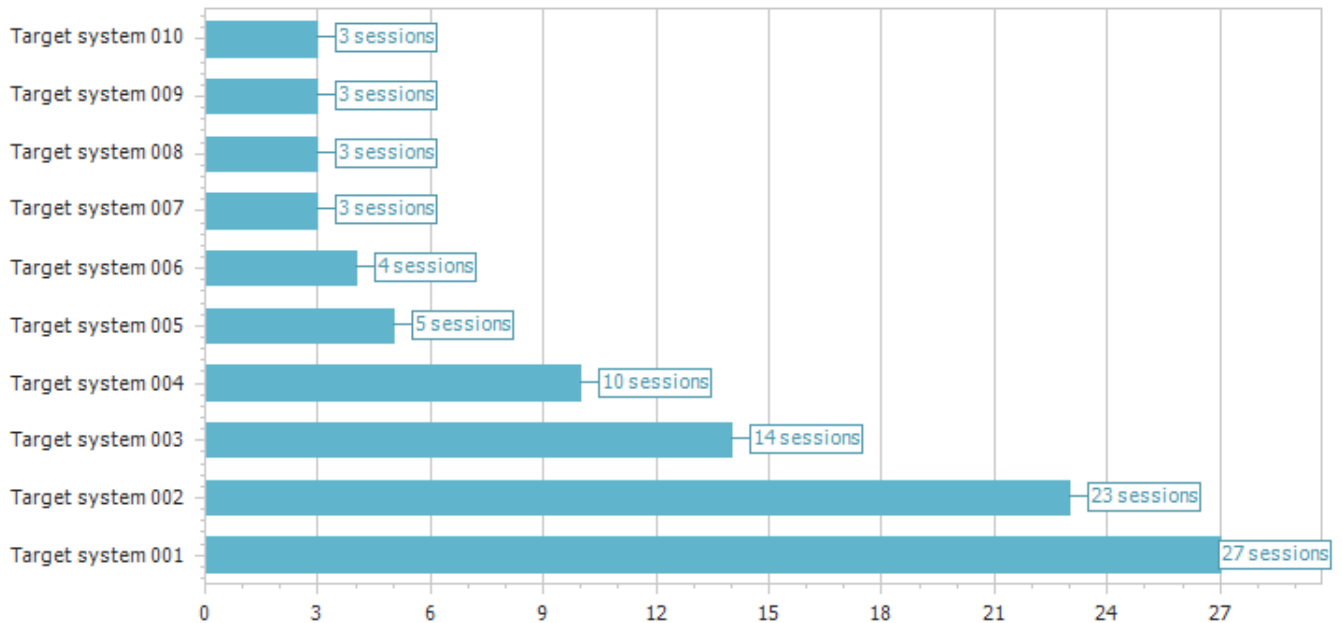
5.12 Sessions per user

Sessions per user - Top 10



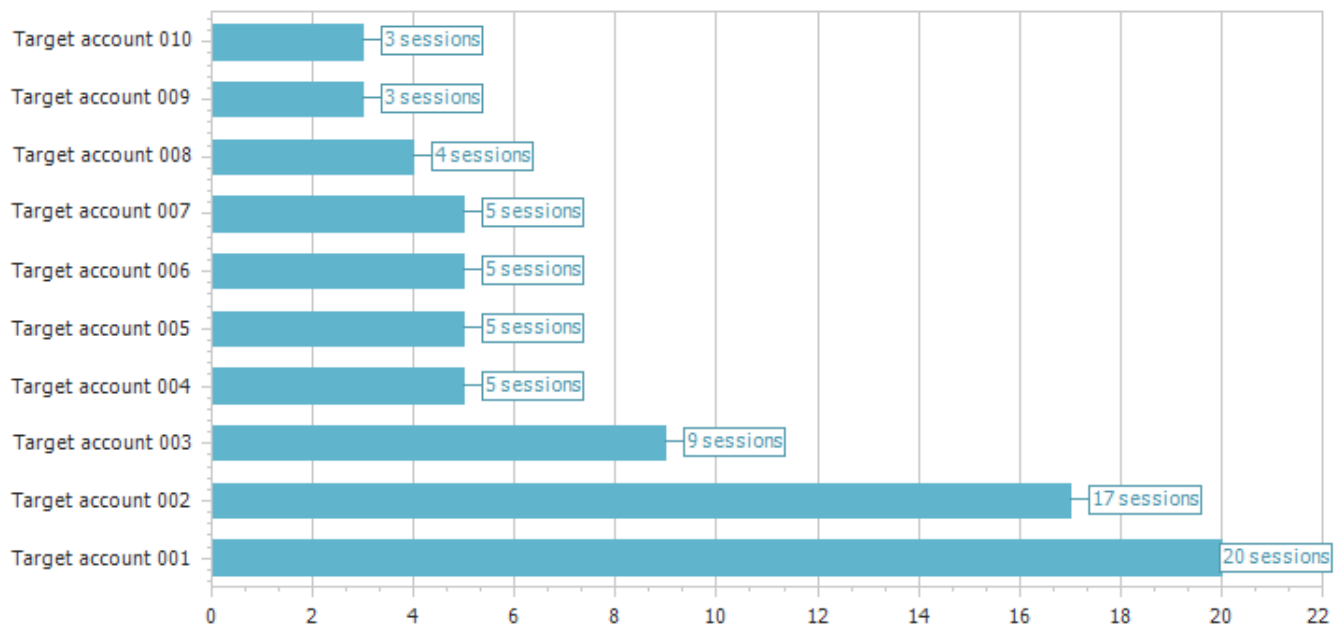
5.13 Sessions per target system

Sessions per target system - Top 10



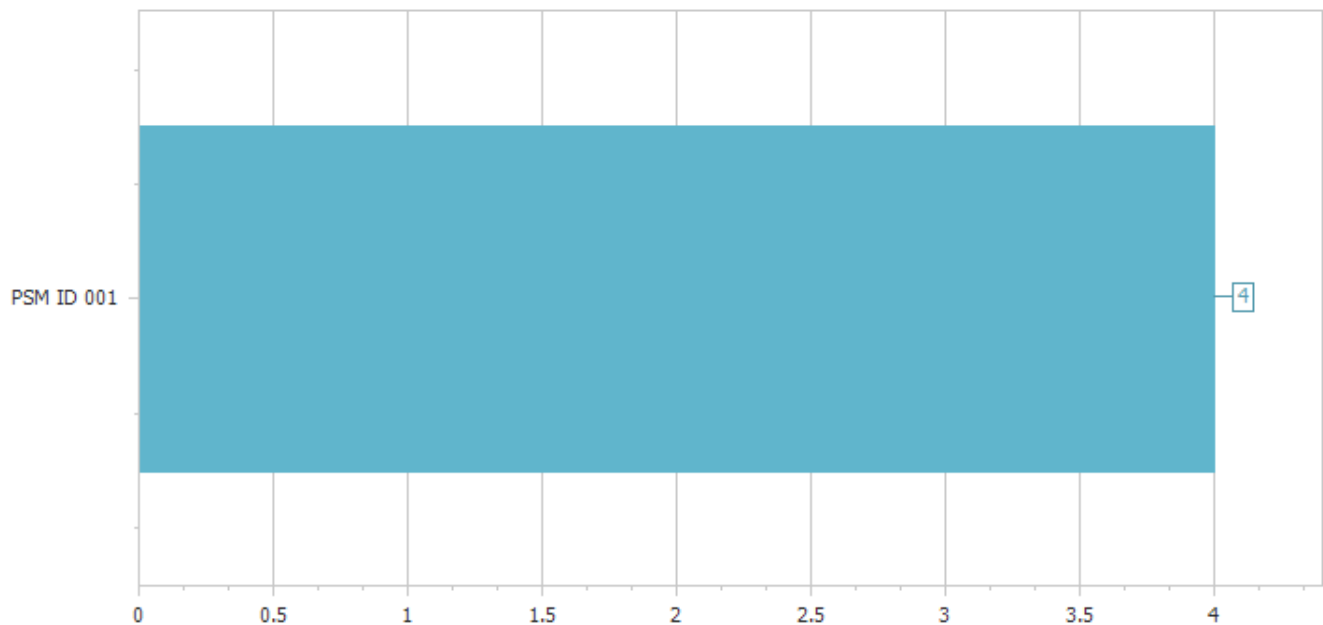
5.14 Sessions per target account

Sessions per target account - Top 10



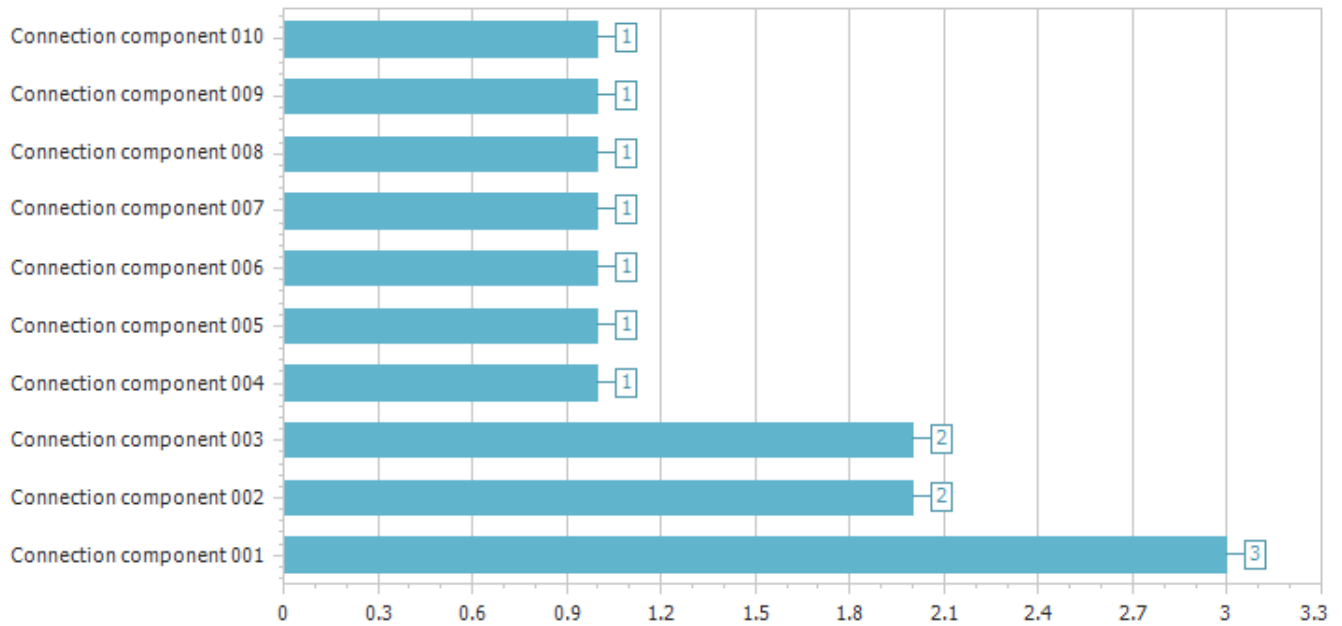
5.15 Max concurrent sessions by PSM server ID

Max concurrent sessions by PSM server ID



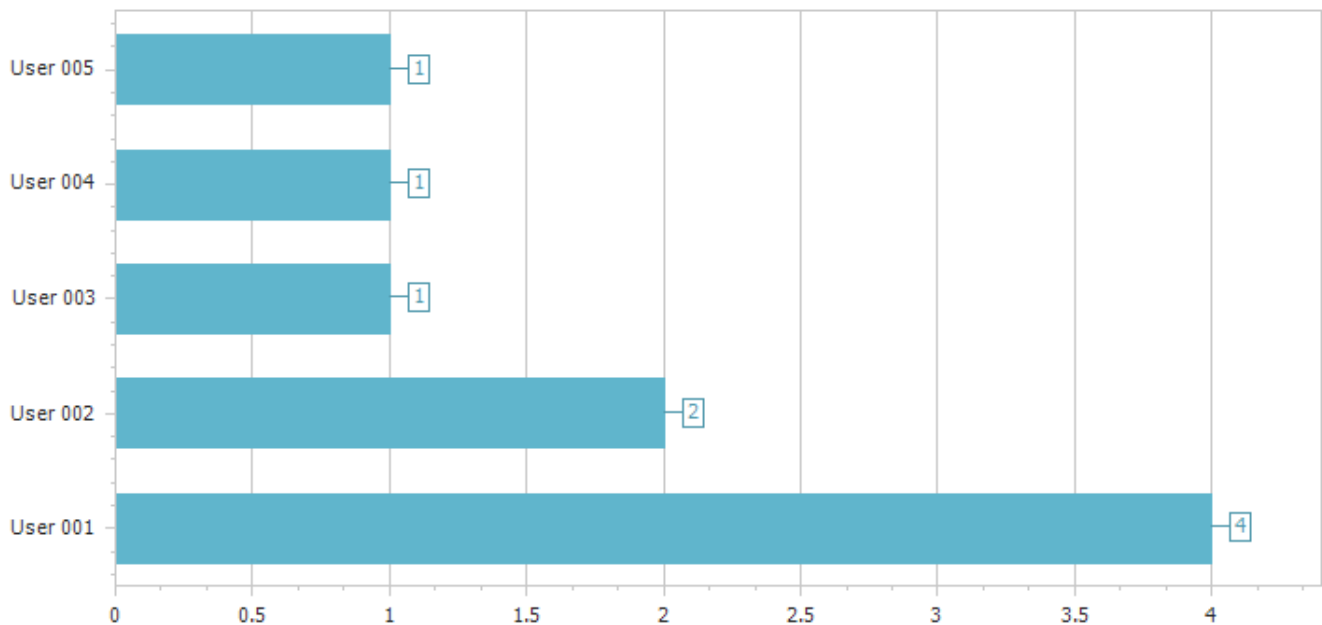
5.16 Max concurrent sessions by connection component

Max concurrent sessions by connection component - Top 10

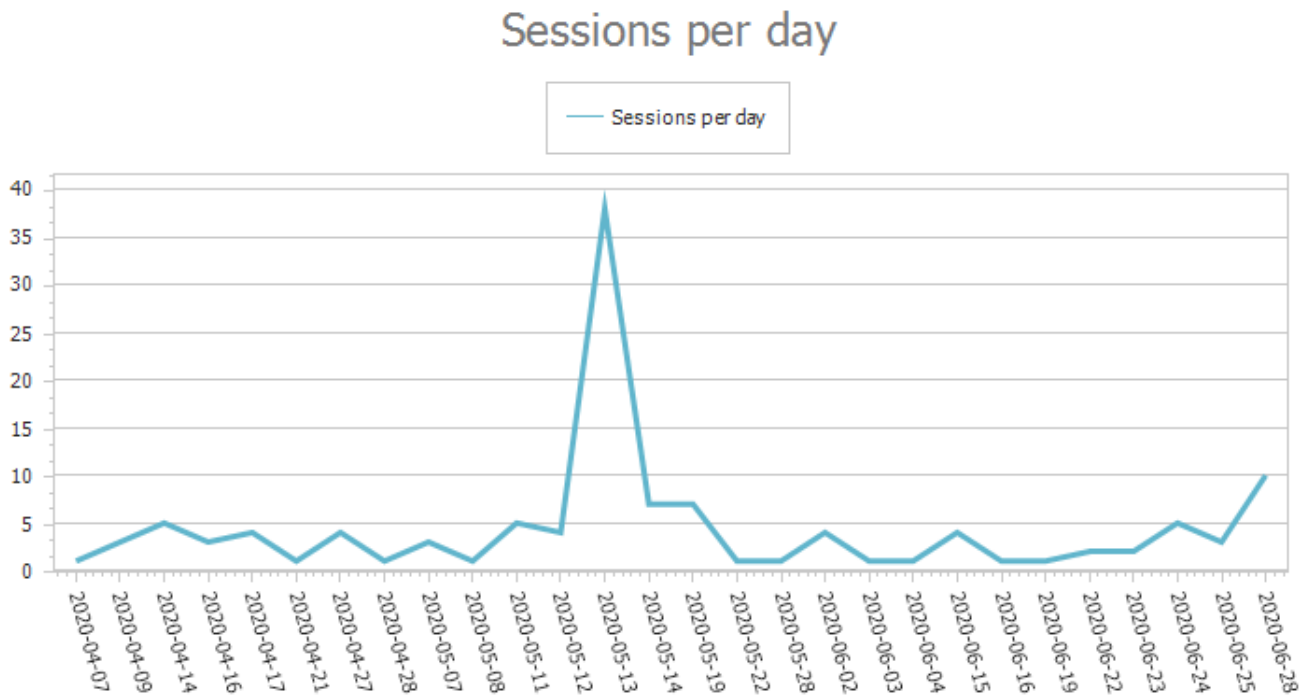


5.17 Max concurrent sessions by user

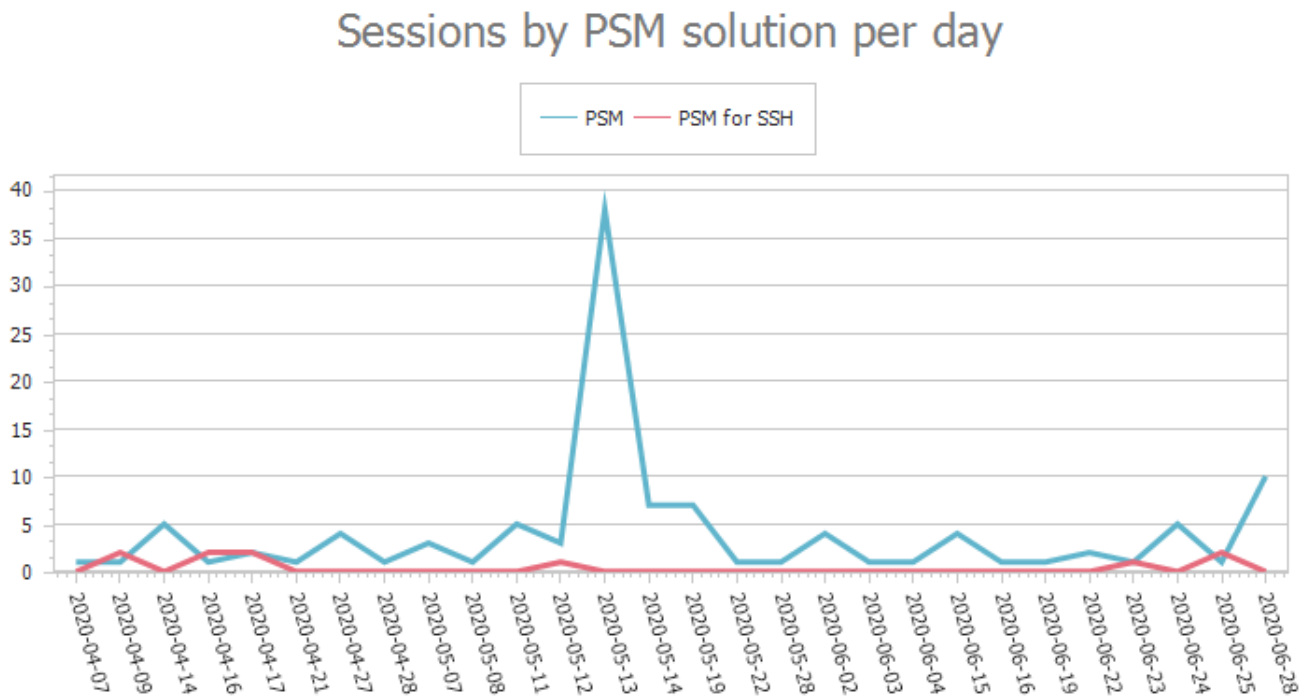
Max concurrent sessions by user - Top 10



5.18 Sessions per day

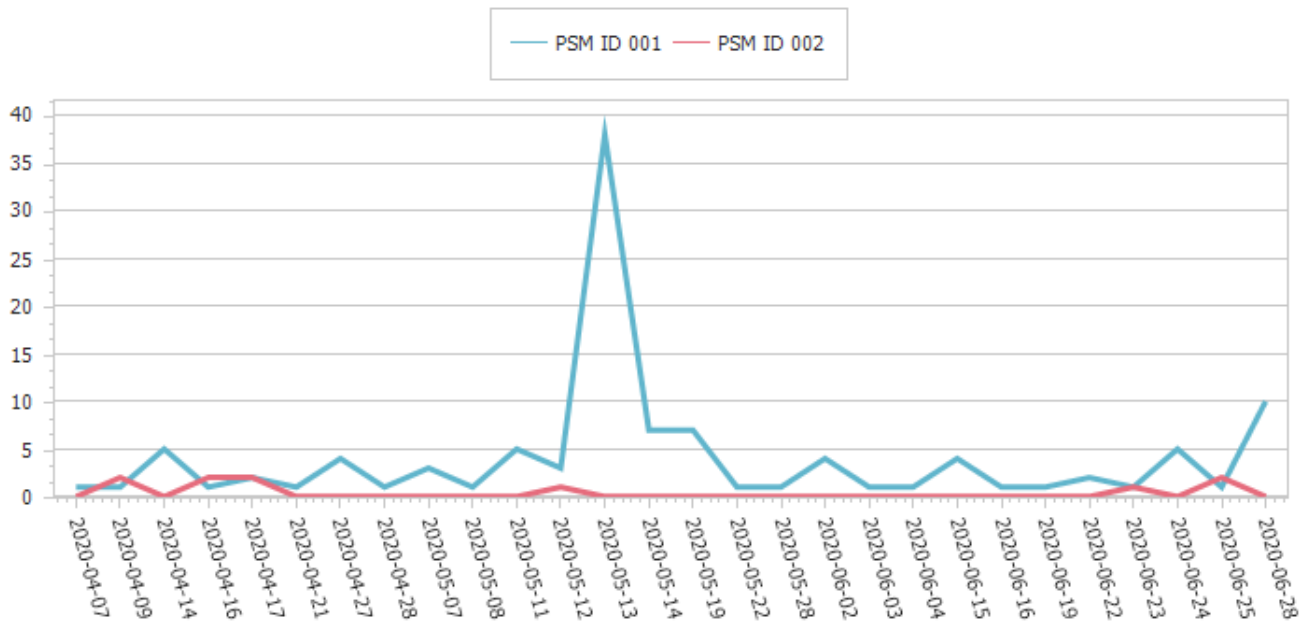


5.19 Sessions by PSM solution per day



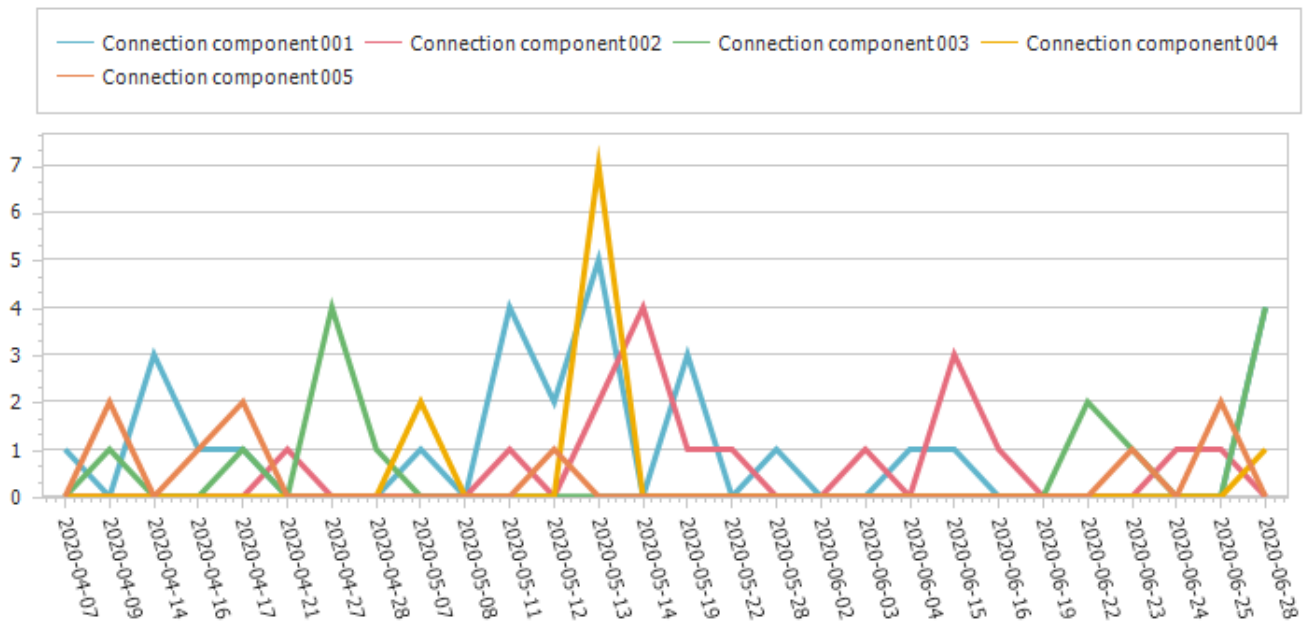
5.20 Sessions by PSM server ID per day

Sessions by PSM server ID per day - Top 5

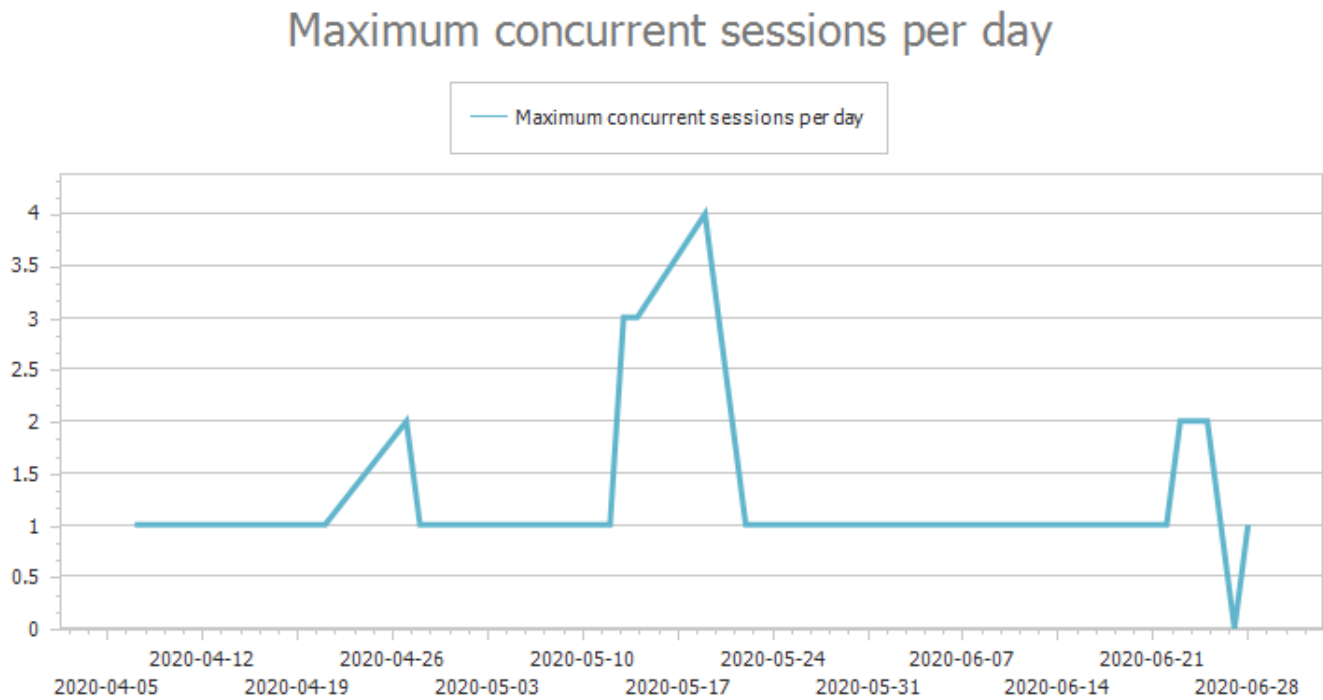


5.21 Sessions by connection component per day

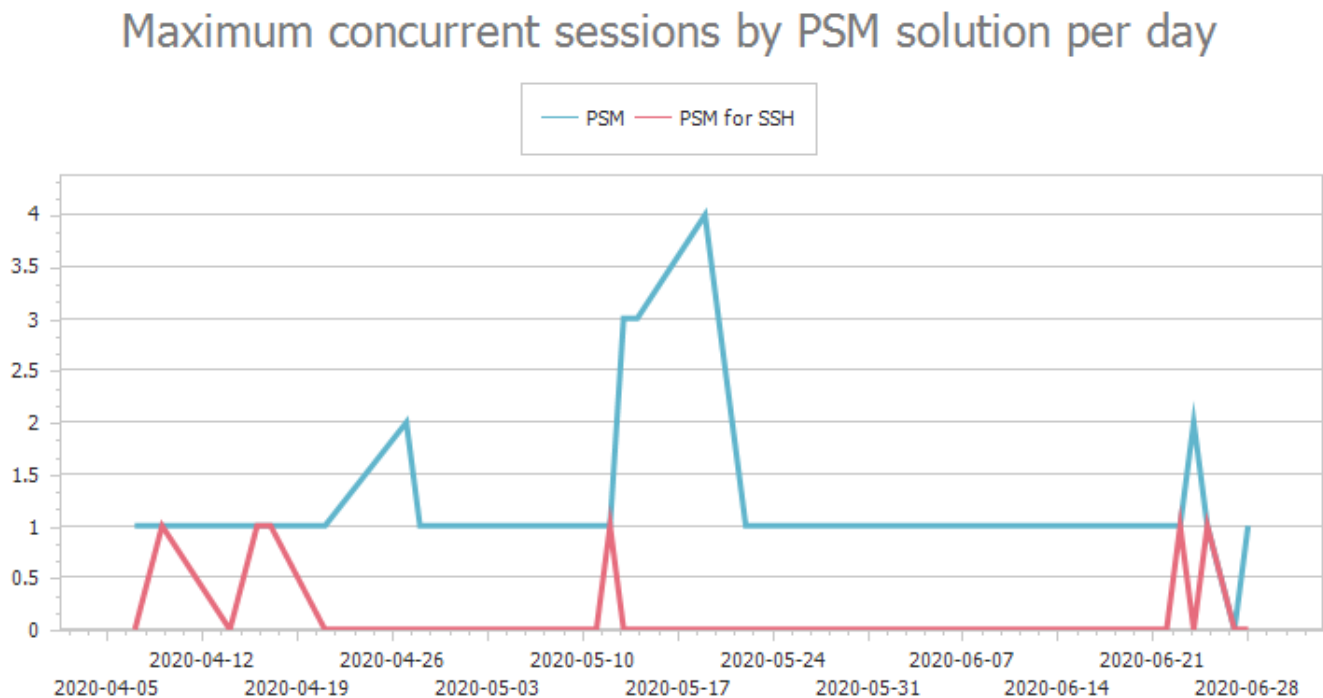
Sessions by connection component per day - Top 5



5.22 Maximum concurrent sessions per day

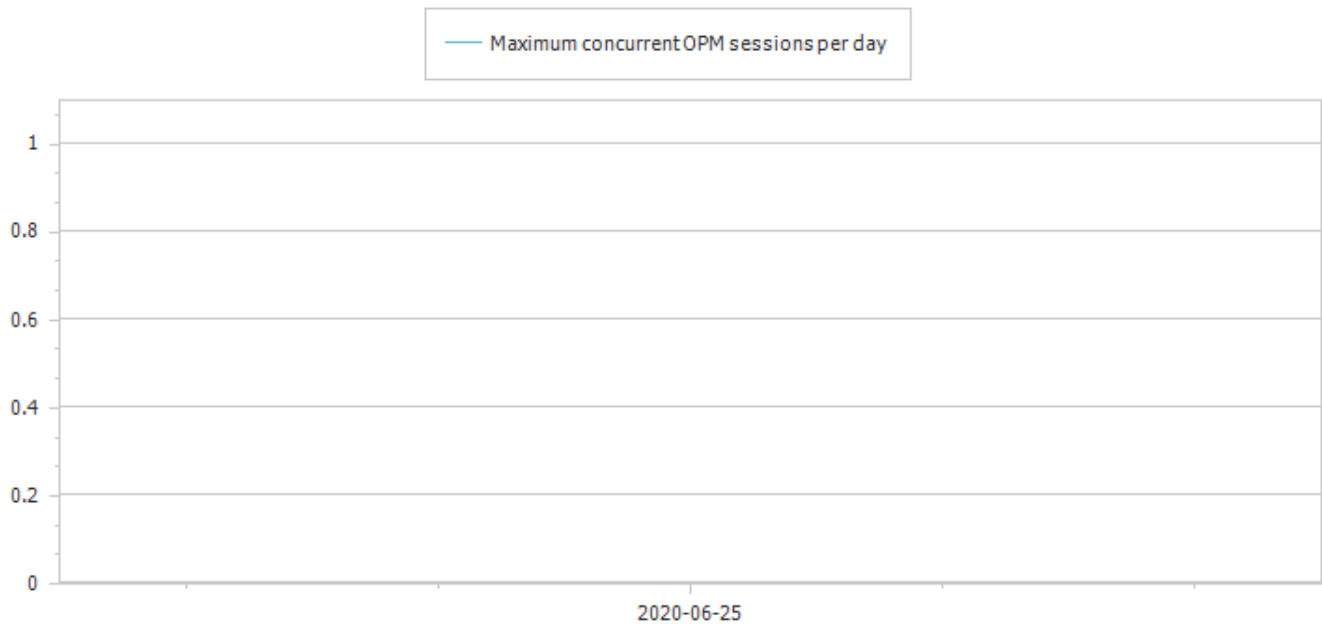


5.23 Maximum concurrent sessions by PSM solution per day



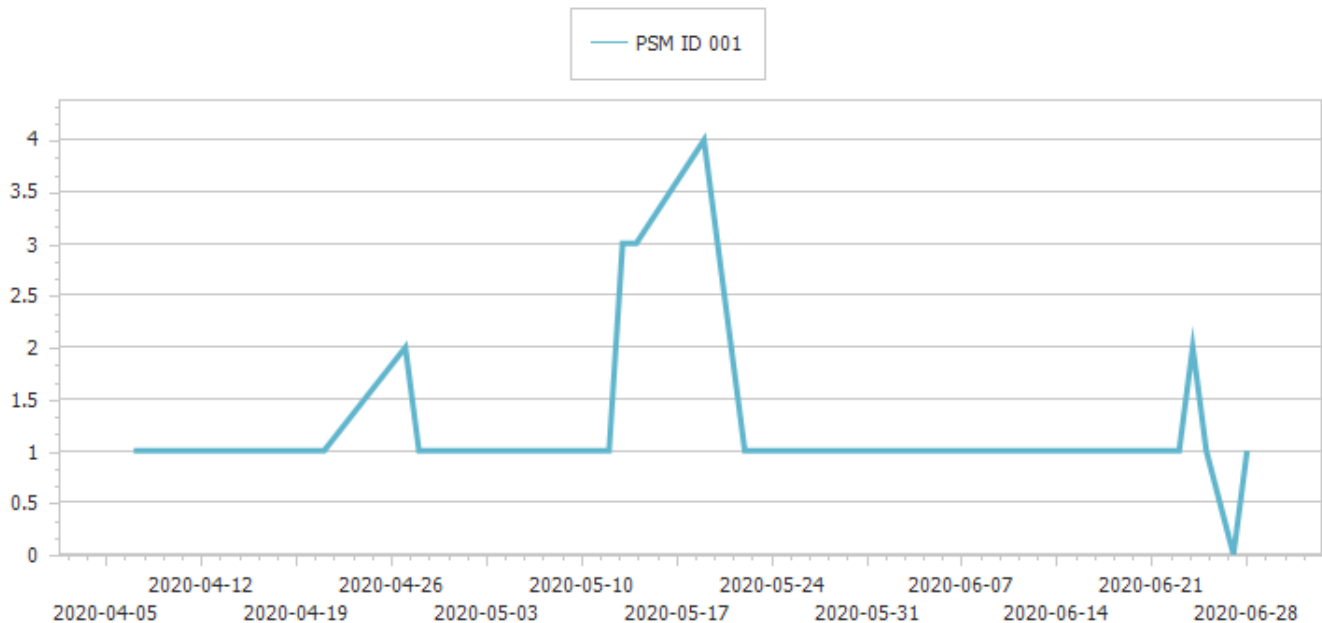
5.24 Maximum concurrent OPM sessions per day

Maximum concurrent OPM sessions per day



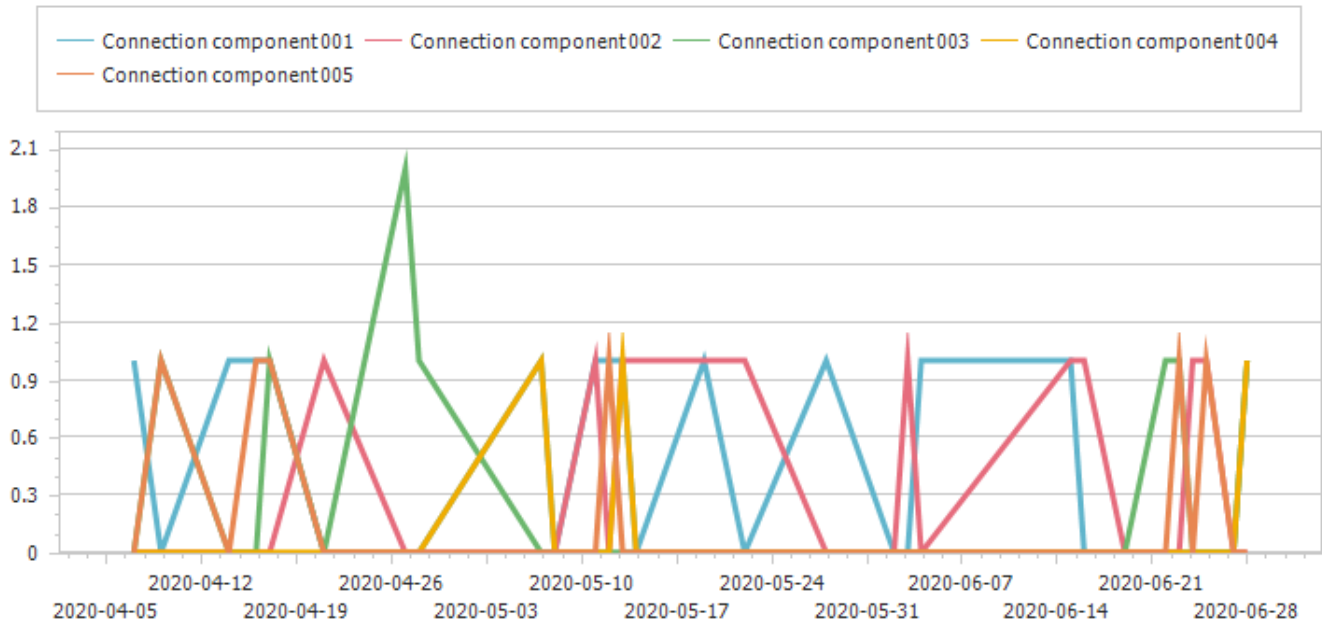
5.25 Maximum concurrent sessions by PSM server ID per day

Maximum concurrent sessions by PSM server ID per day - Top 5



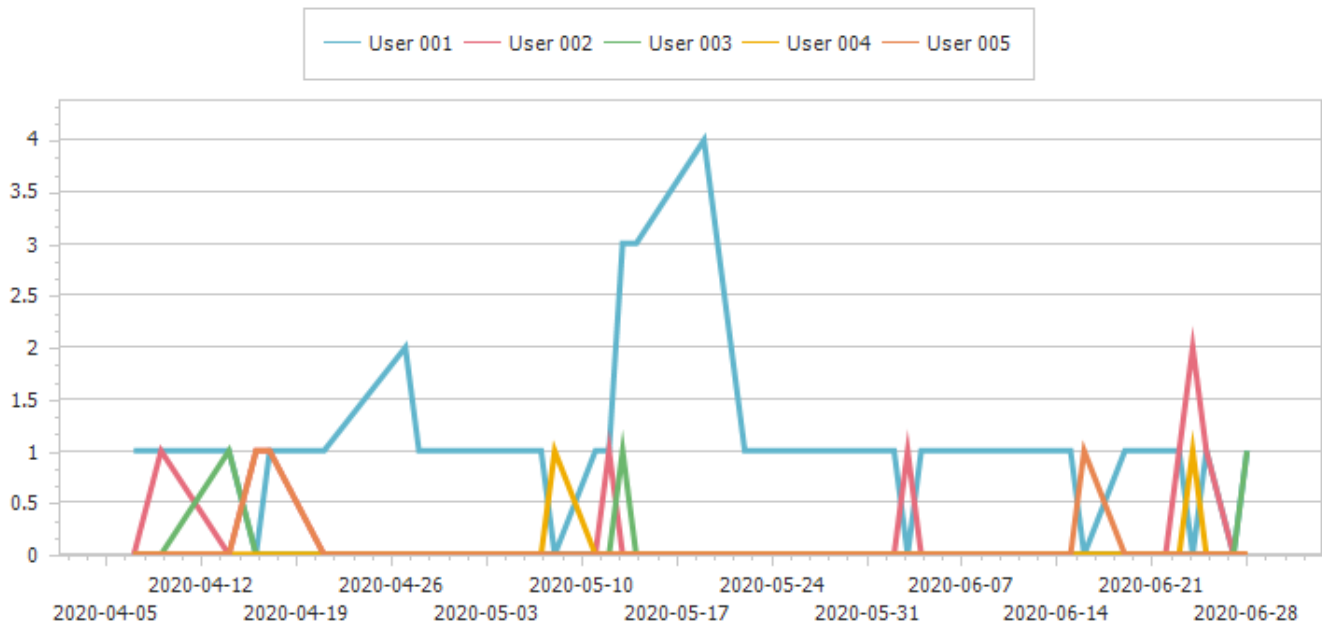
5.26 Maximum concurrent sessions by connection component per day

Max. concurrent sessions by connection comp. per day - Top 5



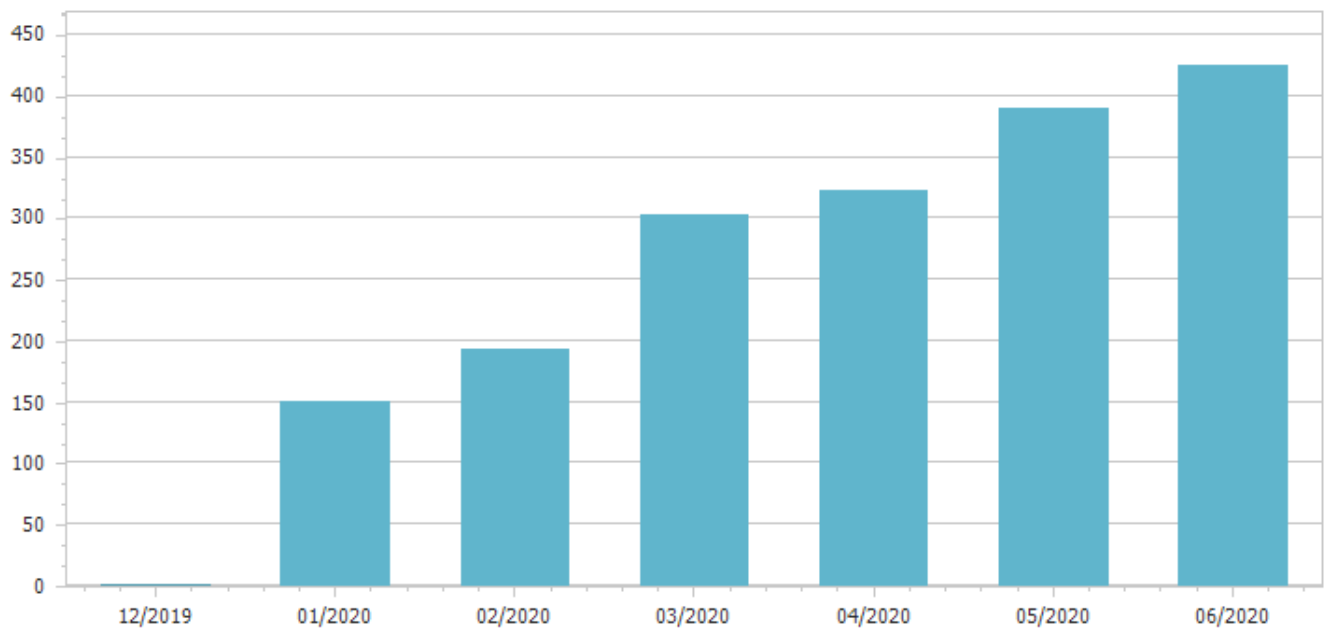
5.27 Maximum concurrent sessions by connection component per day

Maximum concurrent sessions by user per day - Top 5



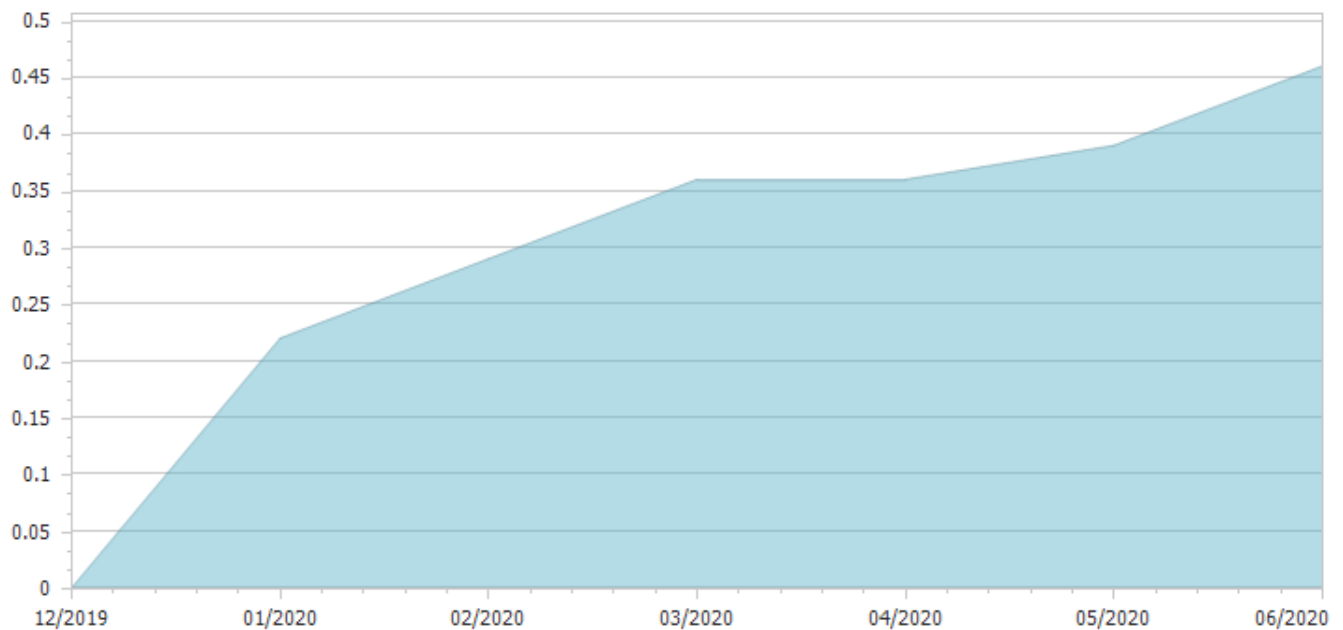
5.28 Recordings development

Recordings development



5.29 Recordings size development

Recordings size development (GB)



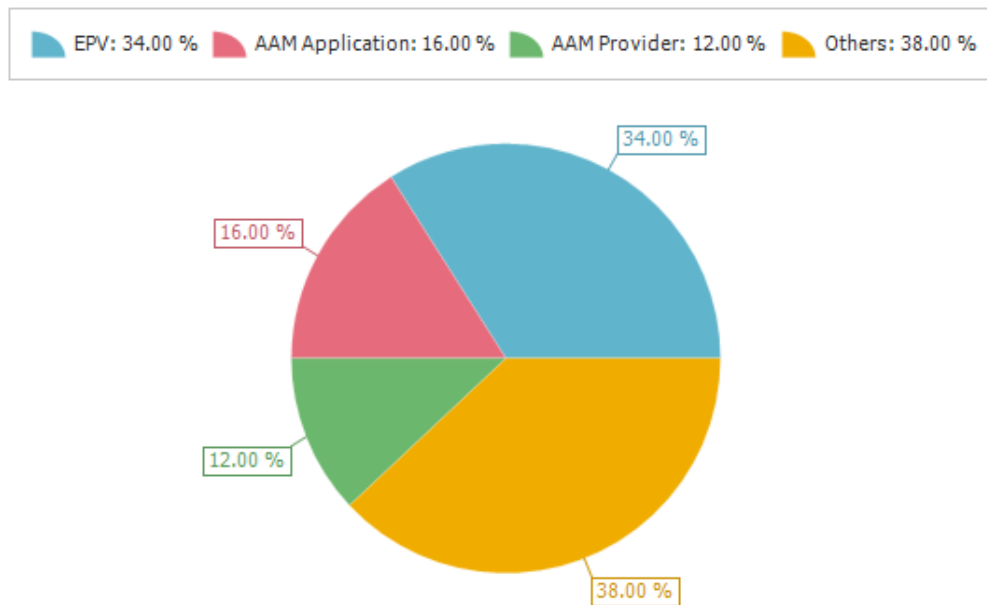
6. User management

6.1 User statistics

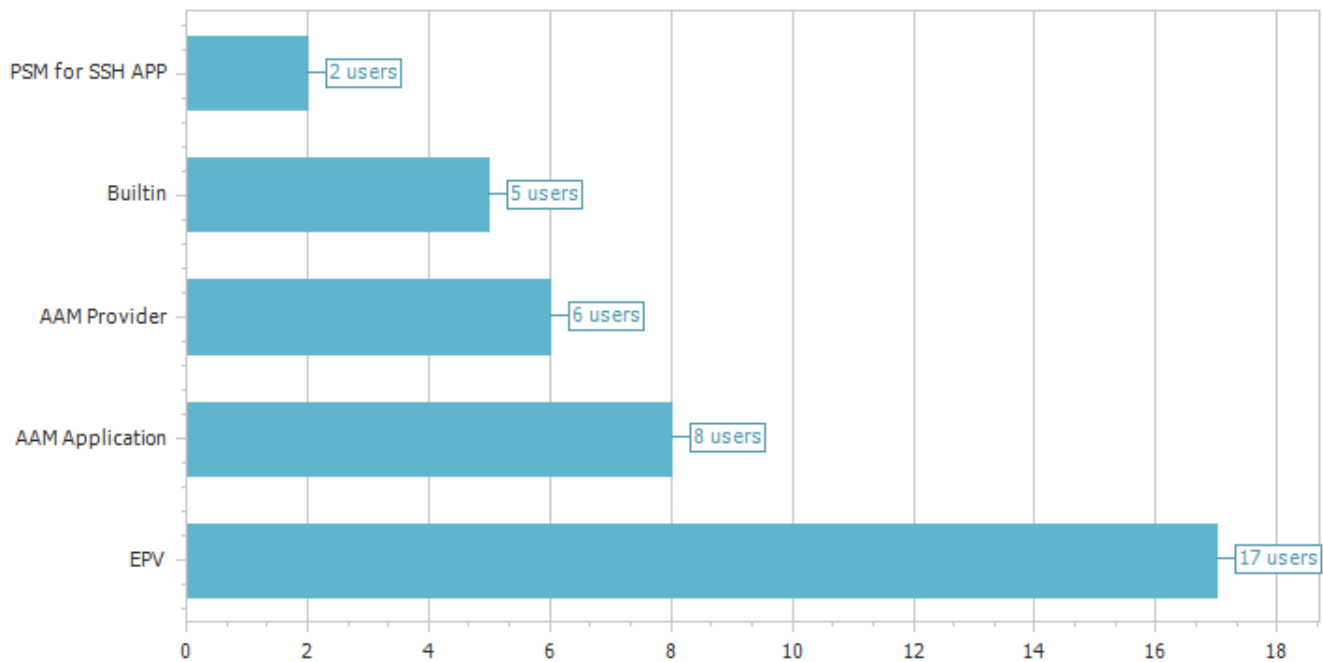
Description	Statistic	Comments
Total number of users	54	Total number of users
Disabled users	3	5.56 % of all users
Internal users	37	68.52 % of all users
External users	13	24.07 % of all users
Total number of groups	30	Total number of groups
Internal groups	18	60 % of all groups
External groups	12	40 % of all groups
LDAP directories	1	
Mappings	3	
EPV	17	0 disabled
AAM Application	8	0 disabled
AAM Provider	6	0 disabled
Builtin	5	1 disabled
PSM for SSH APP	2	0 disabled
PSM for SSH GW	2	0 disabled
PVWA GW	1	0 disabled
PVWA APP	1	0 disabled
CPM	1	0 disabled
PSM APP	1	0 disabled
PSM GW	1	0 disabled
OPM Agent	1	0 disabled
PTA	1	0 disabled
PSM for SSH ADB	1	0 disabled
Backup	1	1 disabled
DR	1	1 disabled

6.2 Users by user type

Users by user type (%) - Top 3

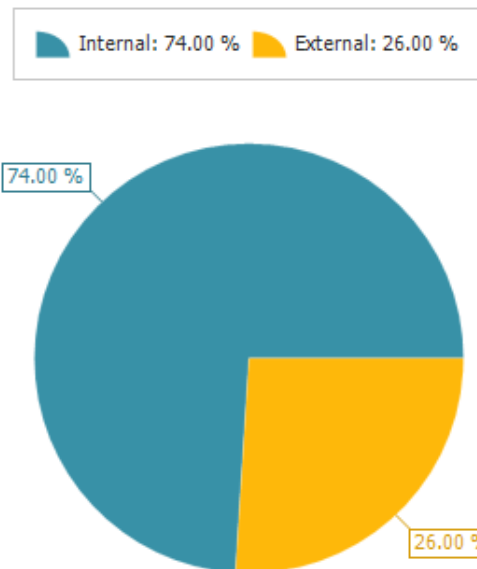


Users by user type - Top 5

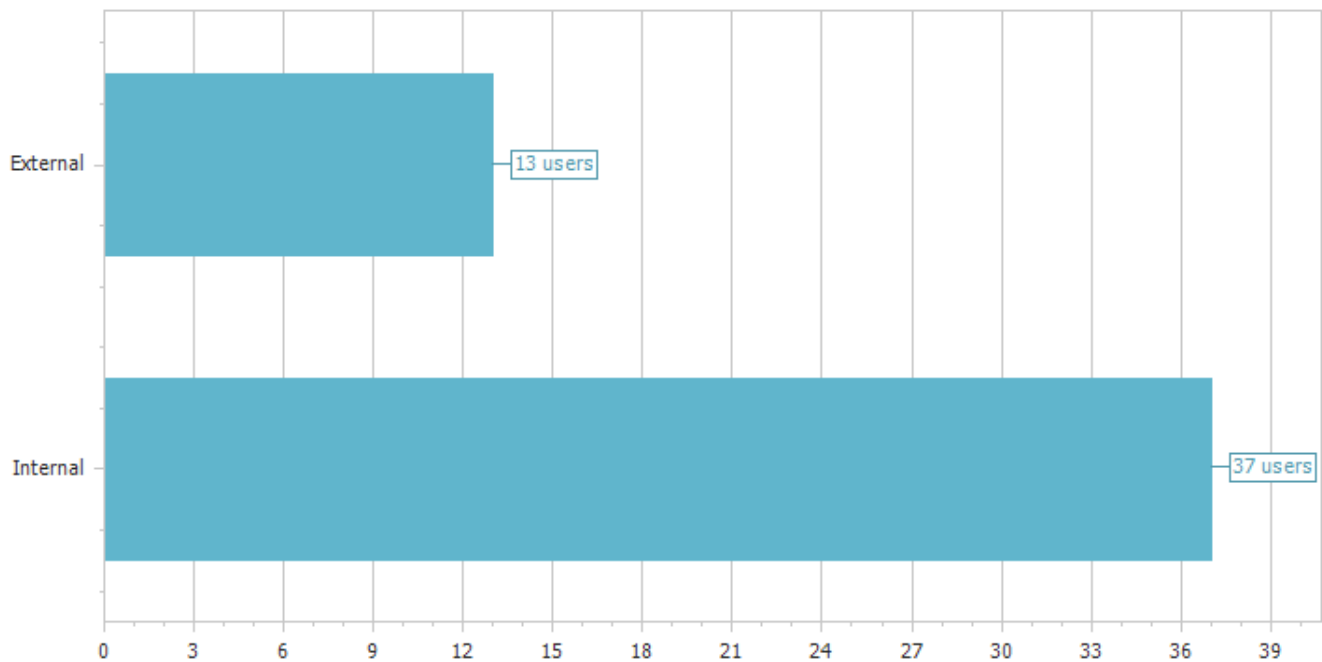


6.3 Users by origin

Users by origin (%)

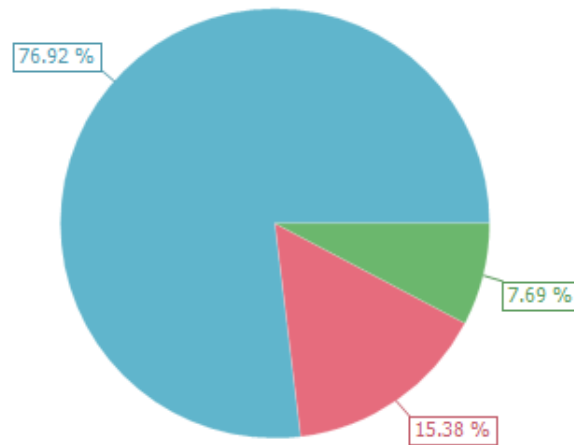
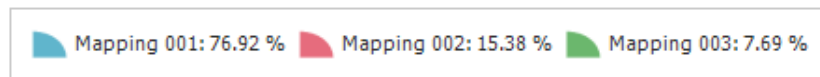


Users by origin

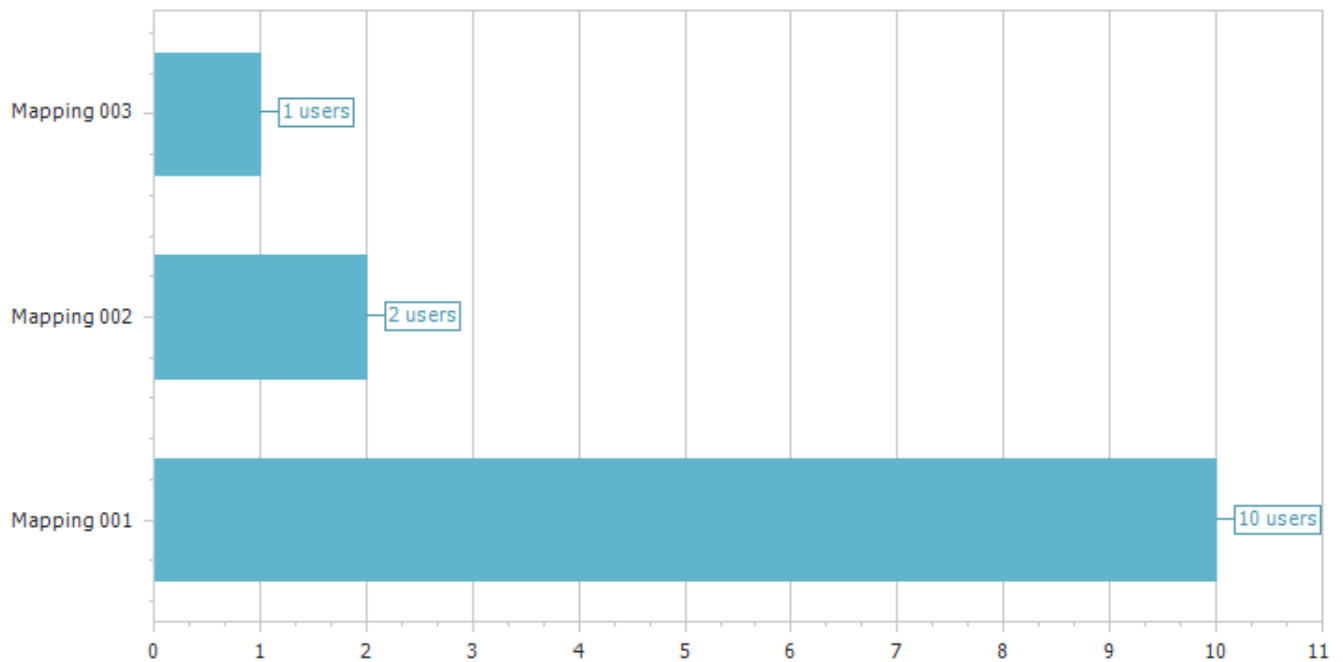


6.4 Users by mapping

Users by mapping (%)

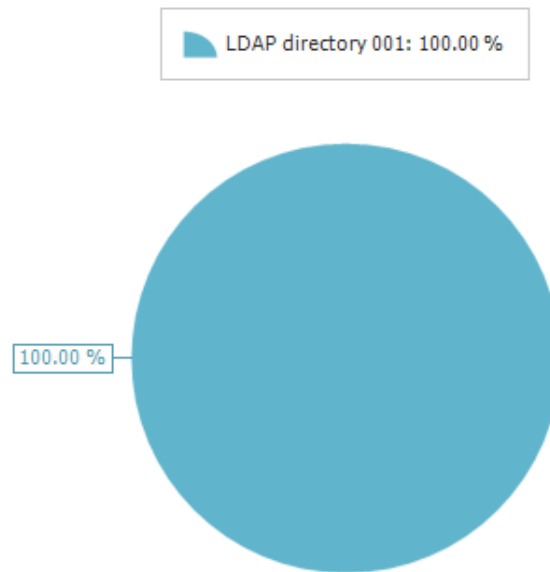


Users by mapping

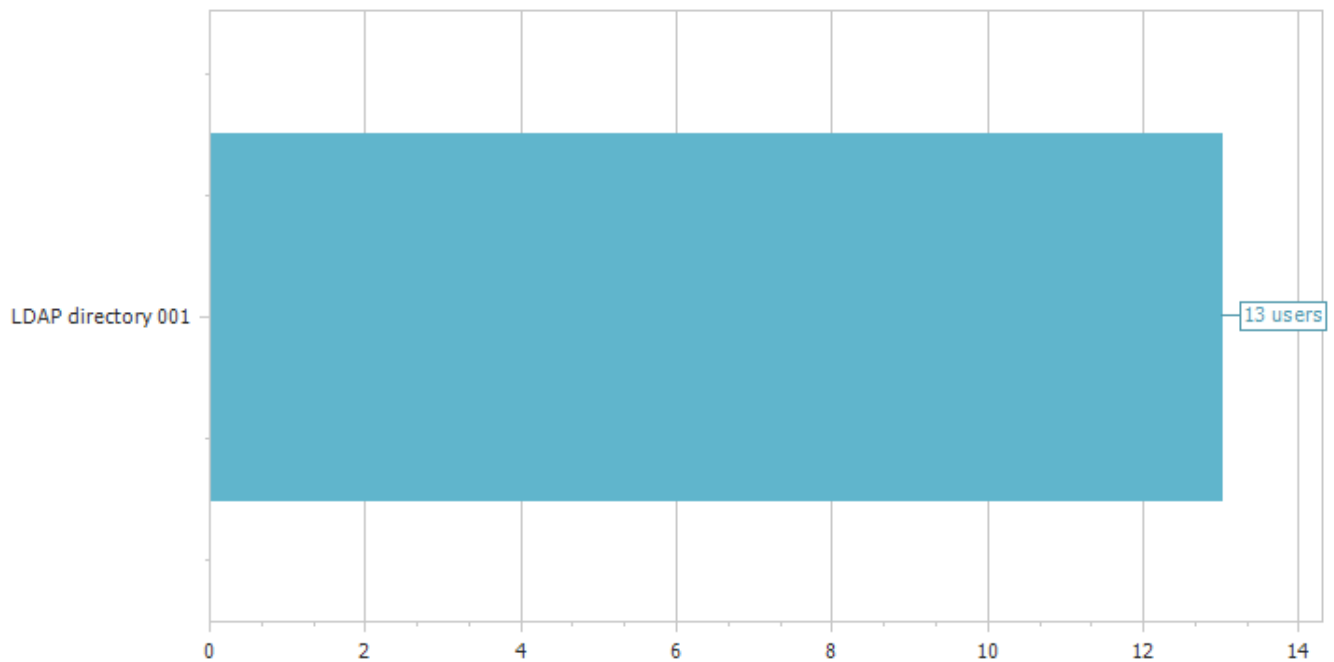


6.5 Users by LDAP directory

Users by LDAP directory (%)

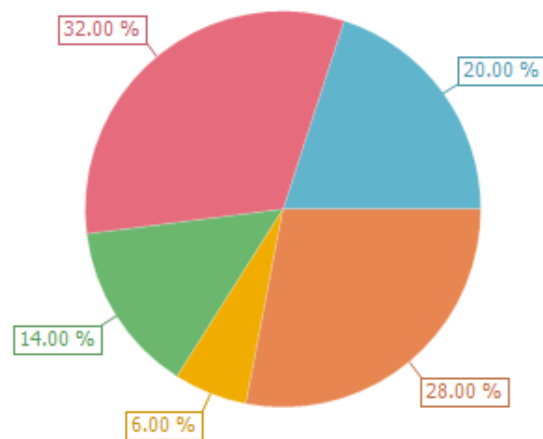


Users by LDAP directory

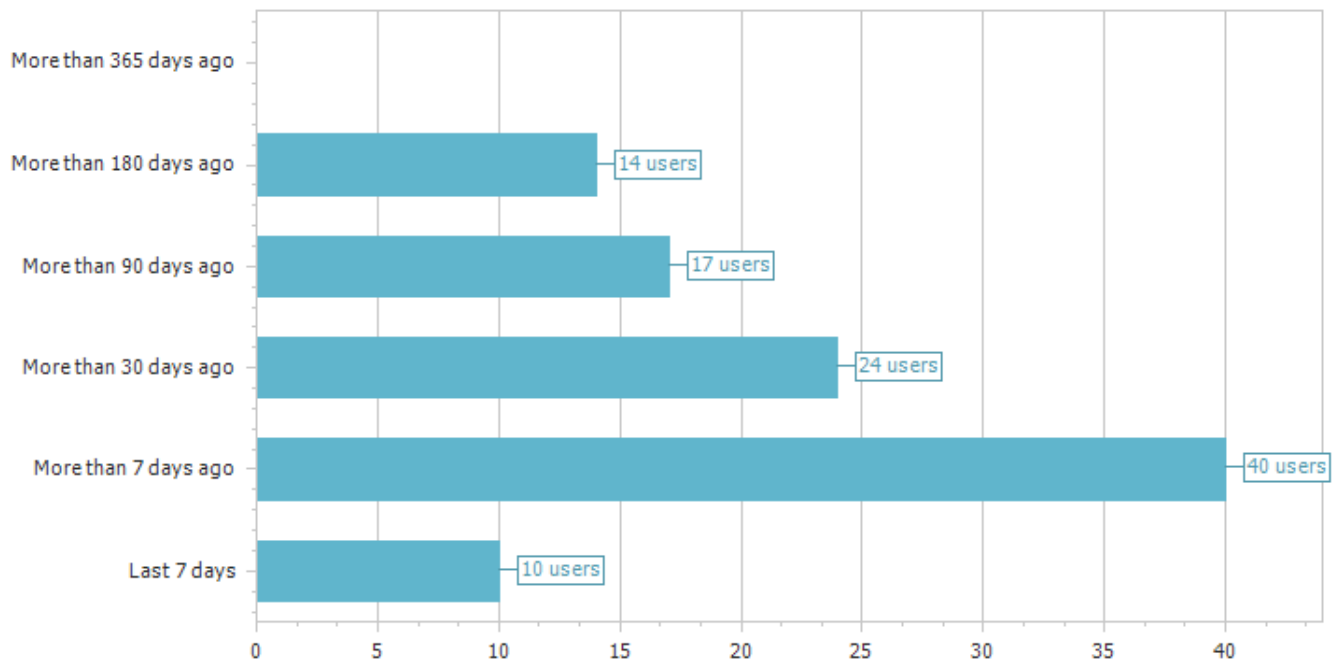


6.6 Users by last logon

Users by last logon (%)

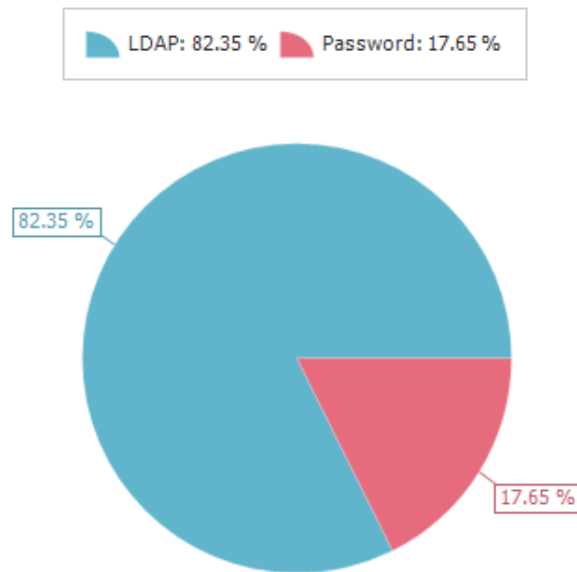


Users by last logon

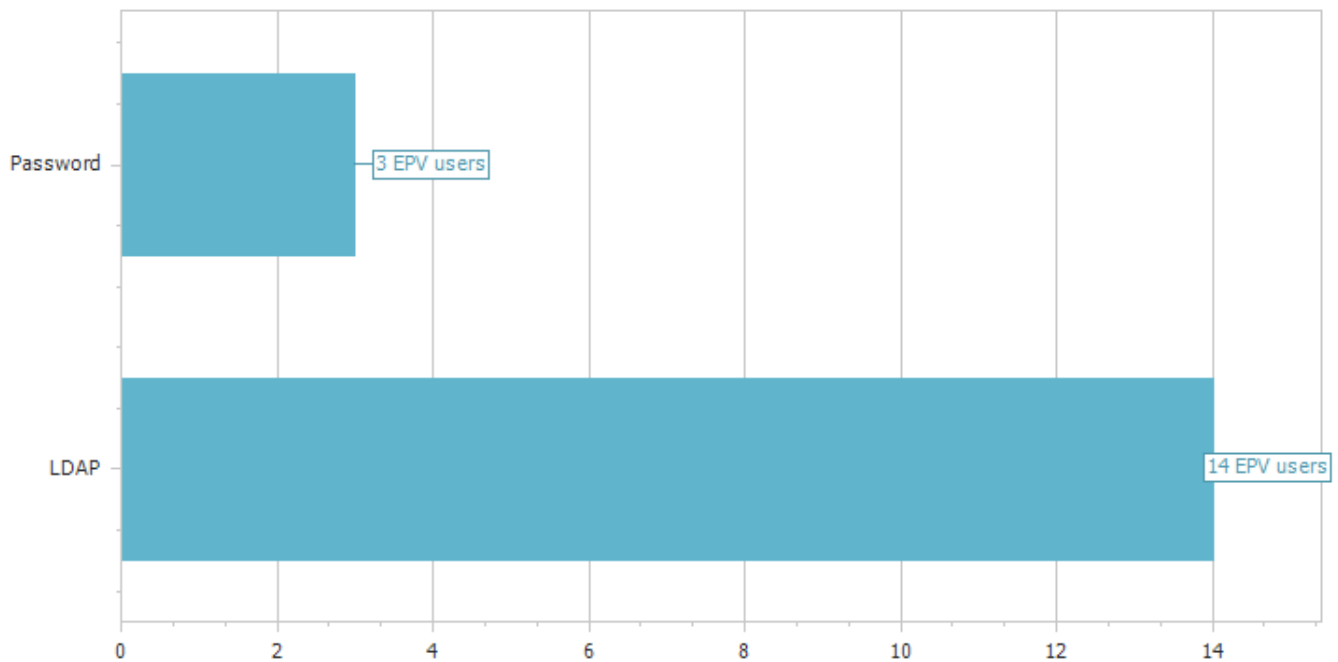


6.7 EPV users by authentication method

EPV users by authentication method (%)

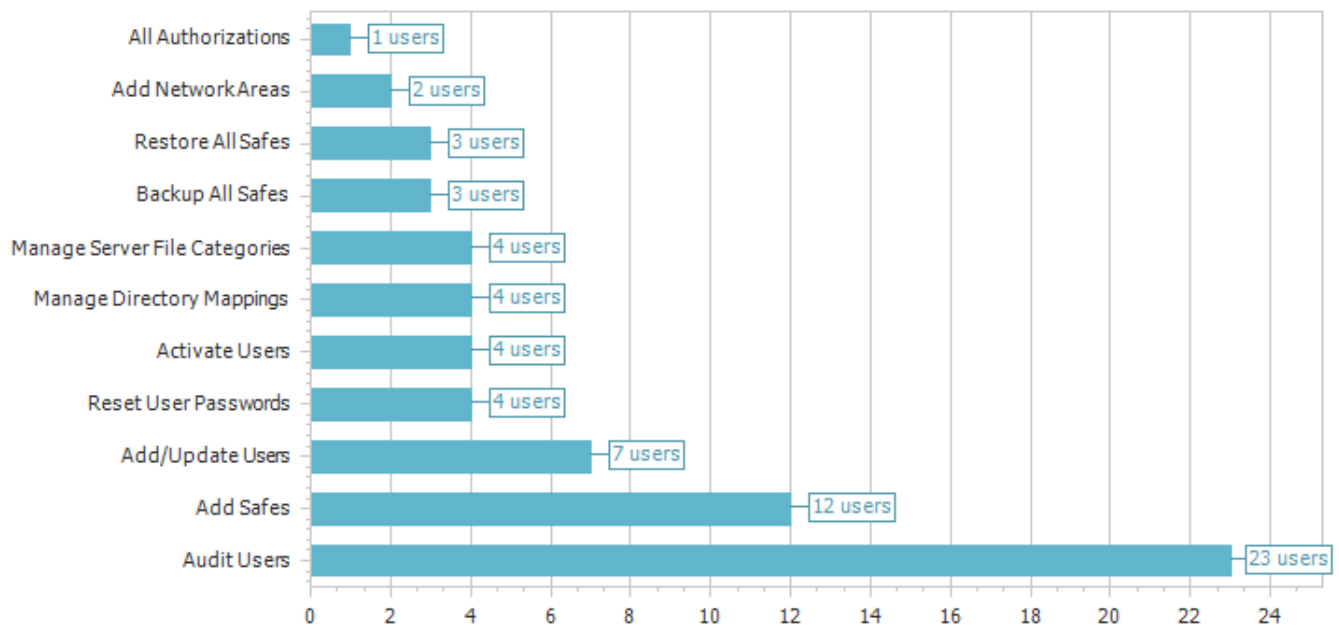


EPV users by authentication method



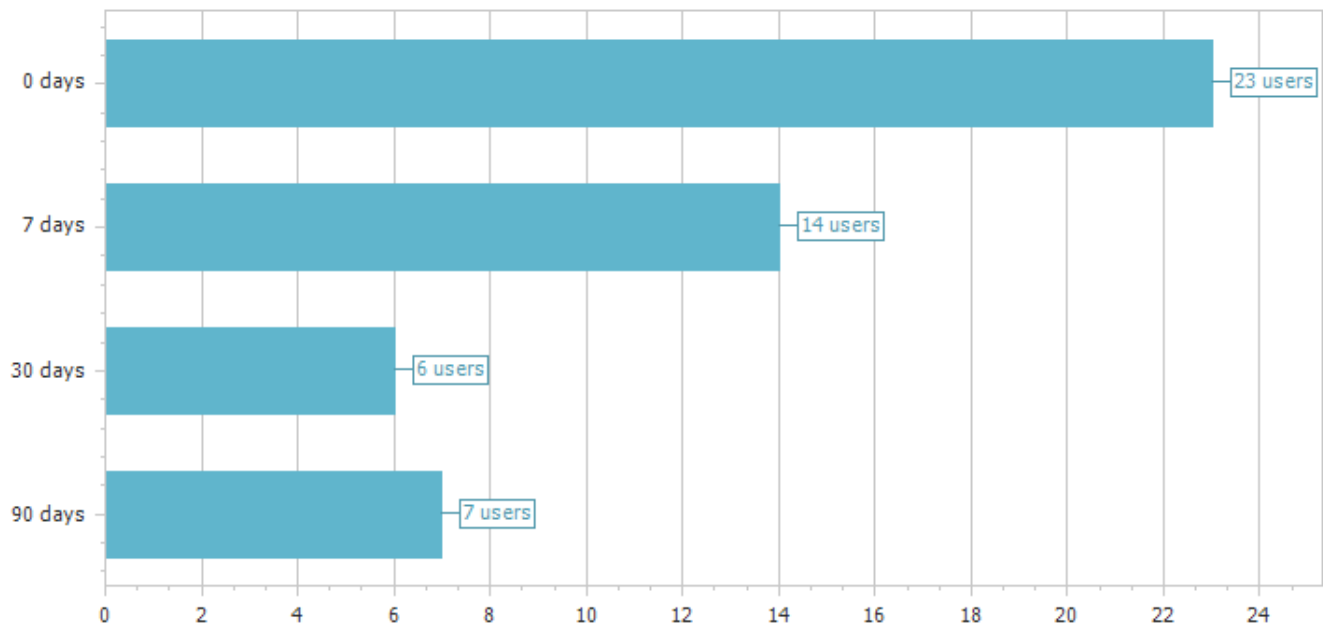
6.8 User authorizations

User authorizations



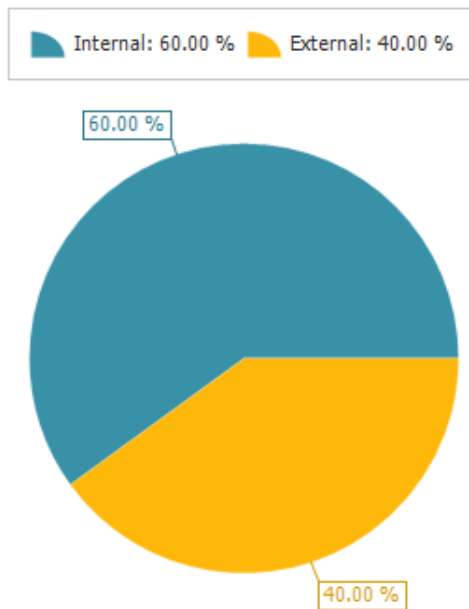
6.9 Users by audit log retention

Users by audit log retention

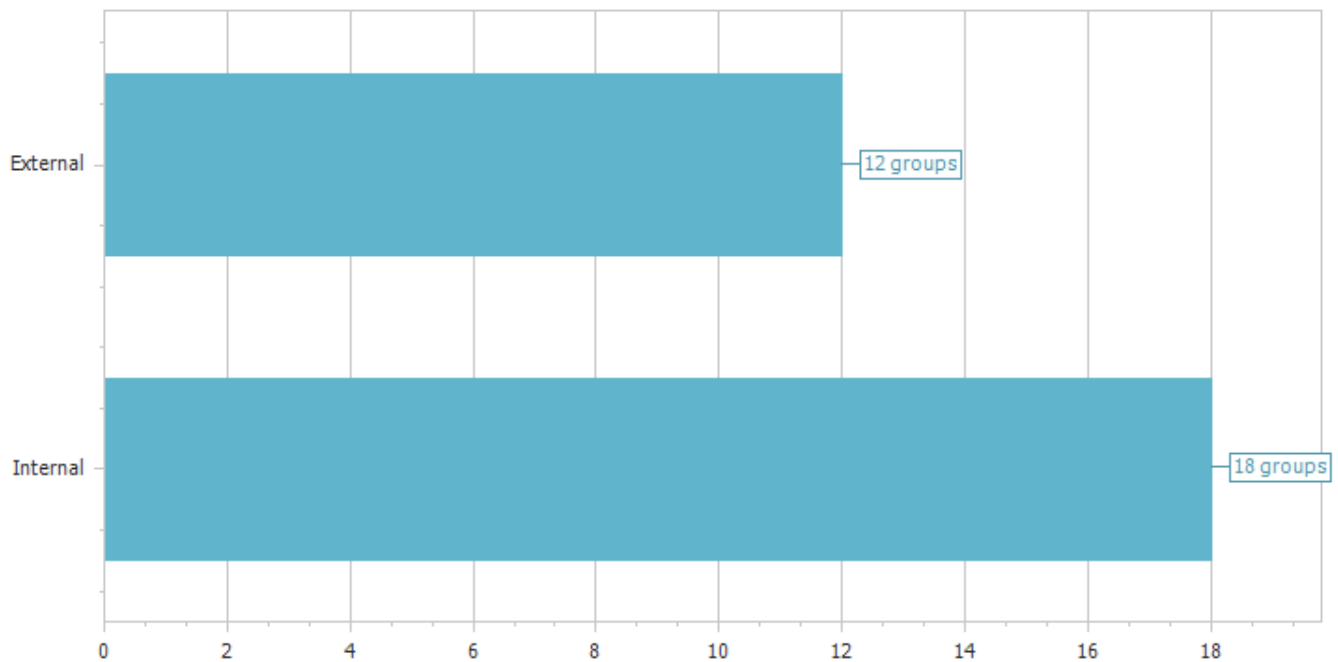


6.10 Groups by origin

Groups by origin (%)

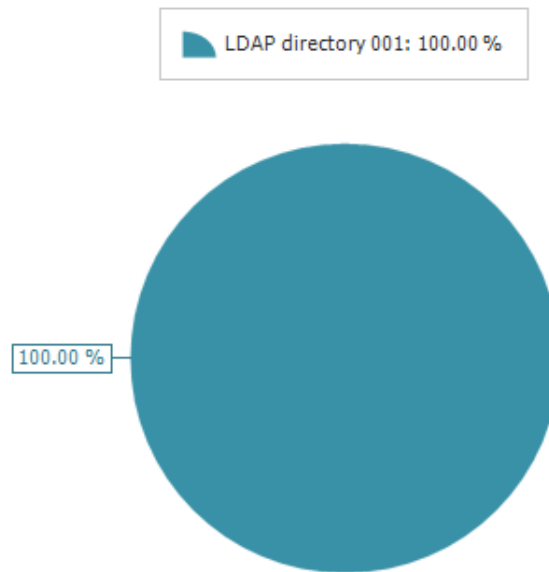


Groups by origin

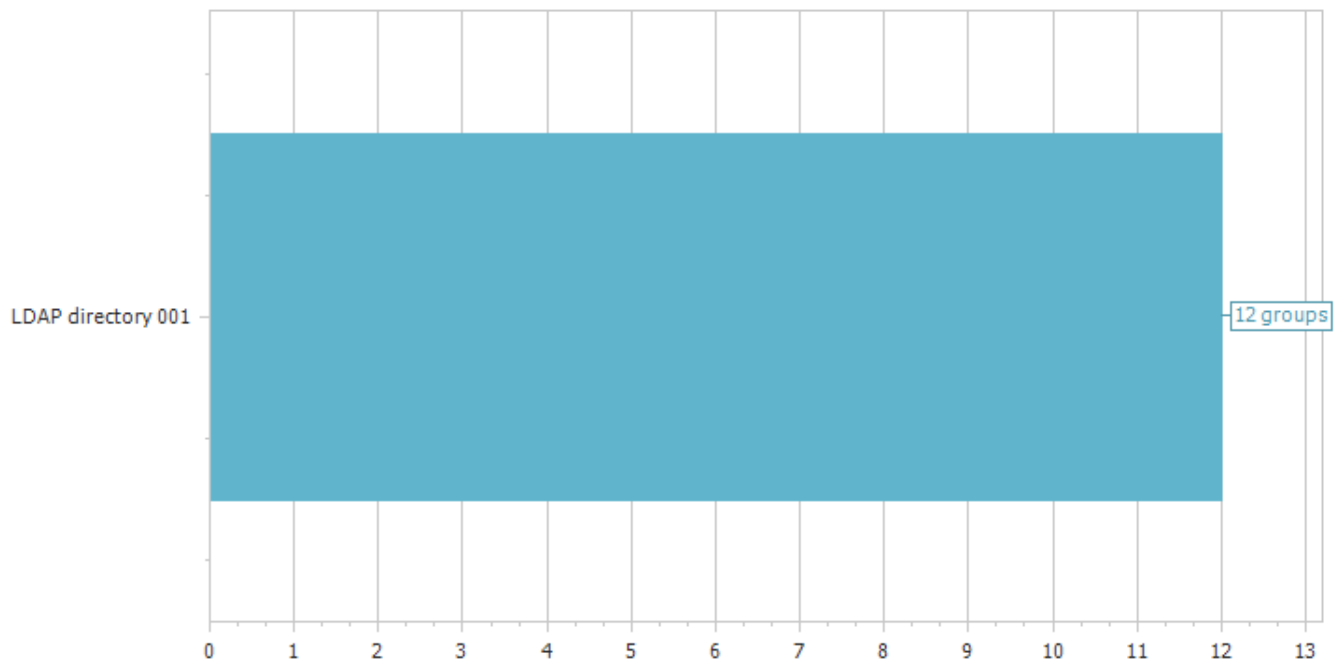


6.11 Groups by LDAP directory

Groups by LDAP directory (%)

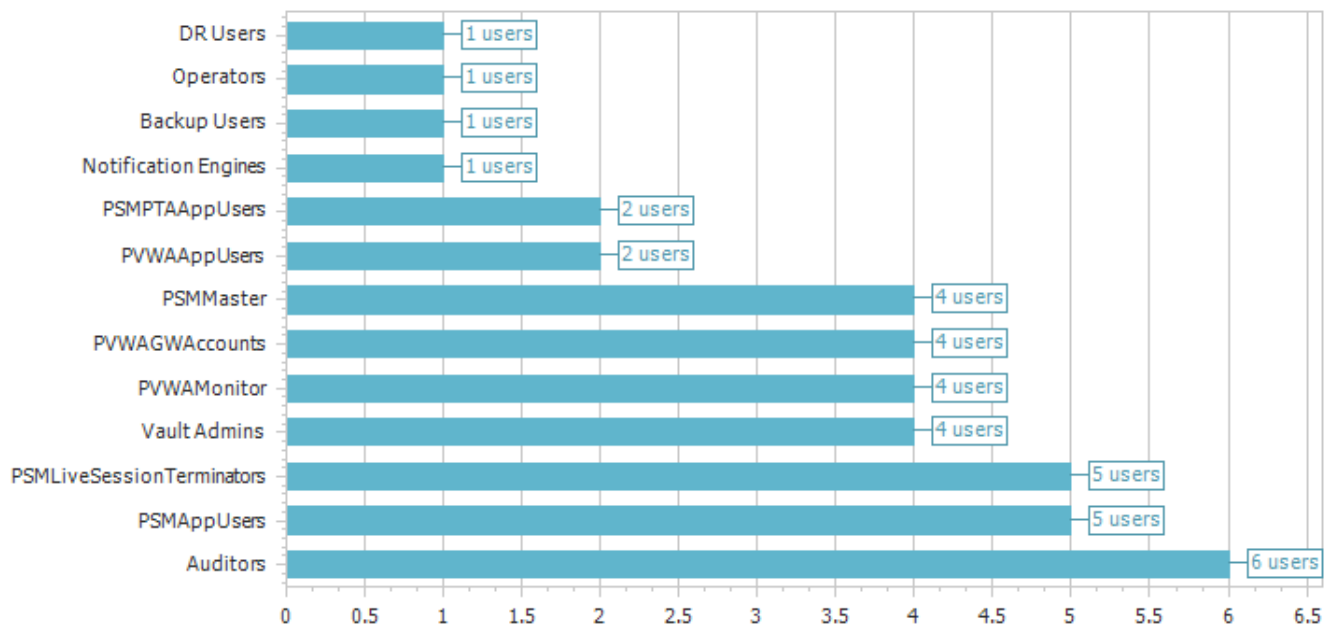


Groups by LDAP directory



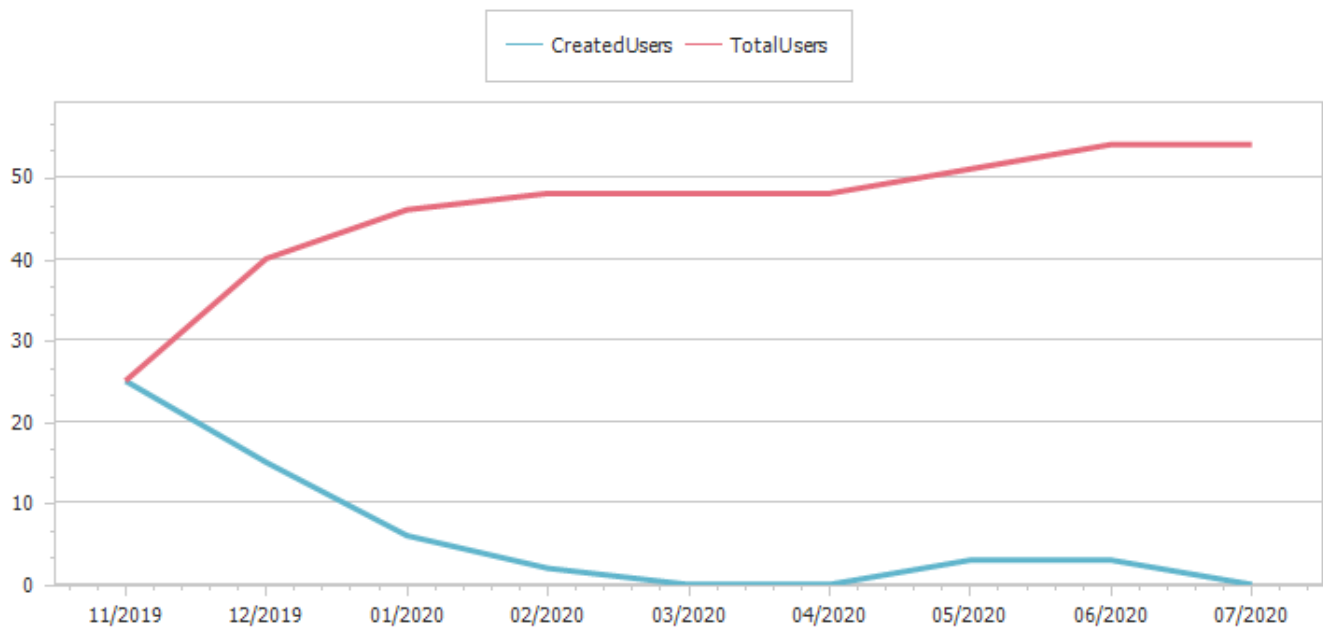
6.12 Members of builtin groups

Members of builtin groups



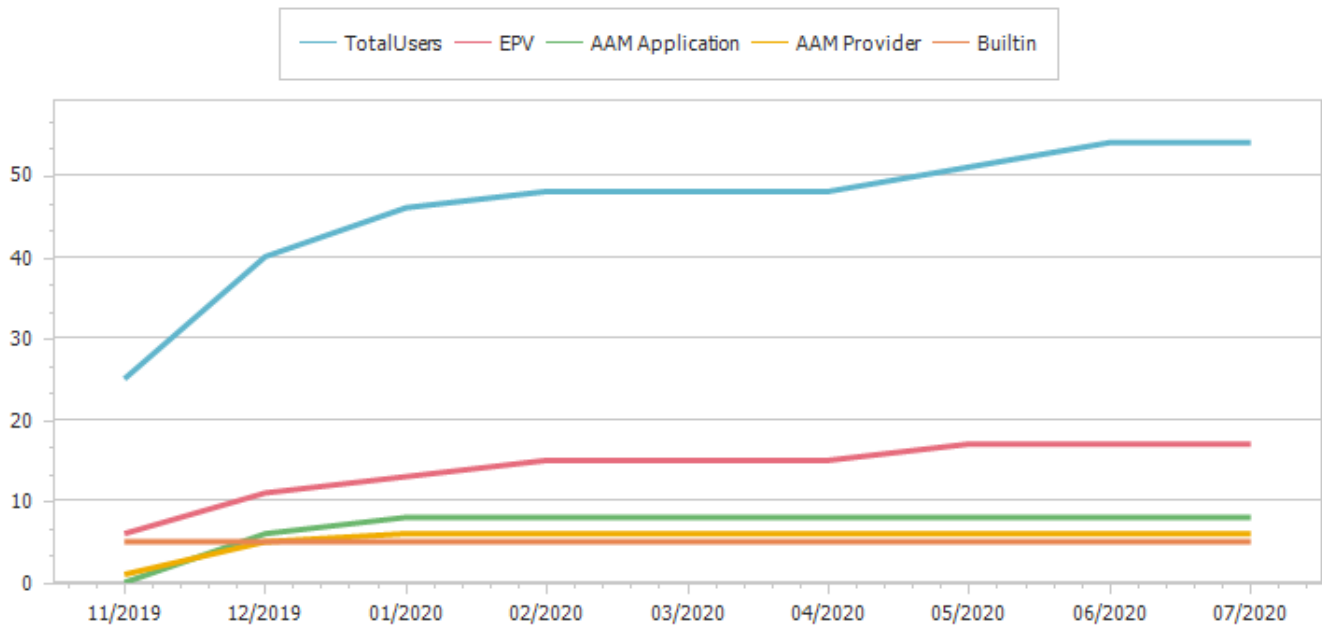
6.13 Users development

Users development



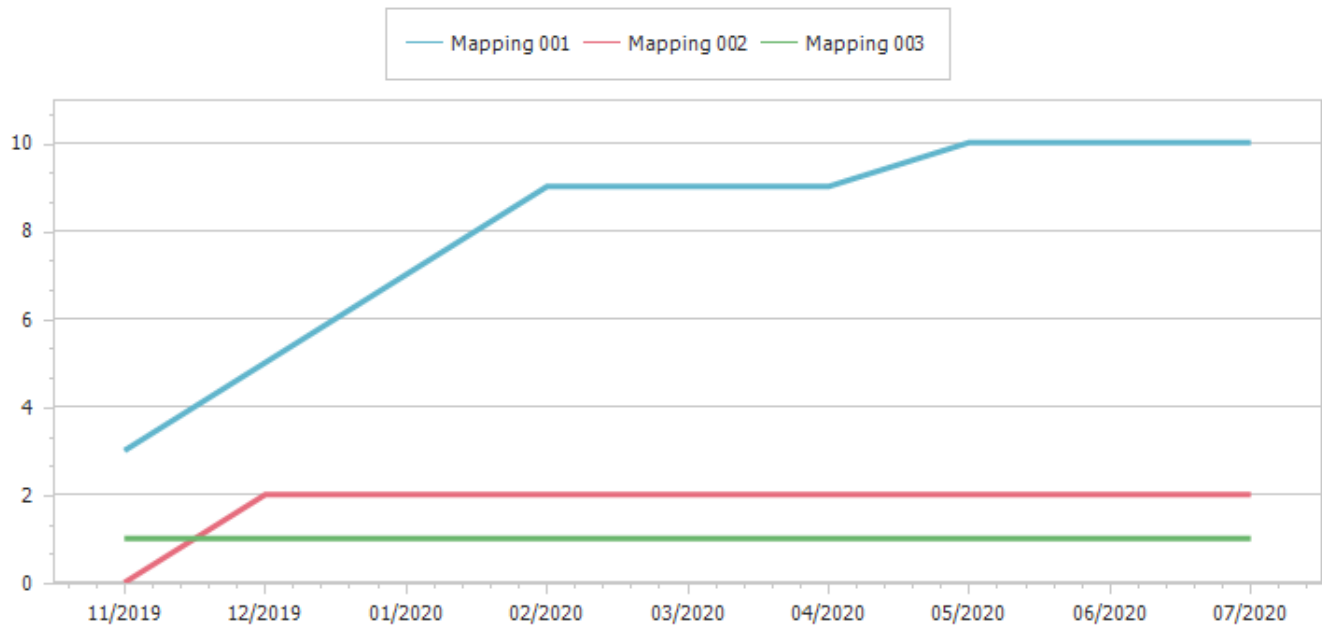
6.14 Users development by user type

Users development by user type - Top 5



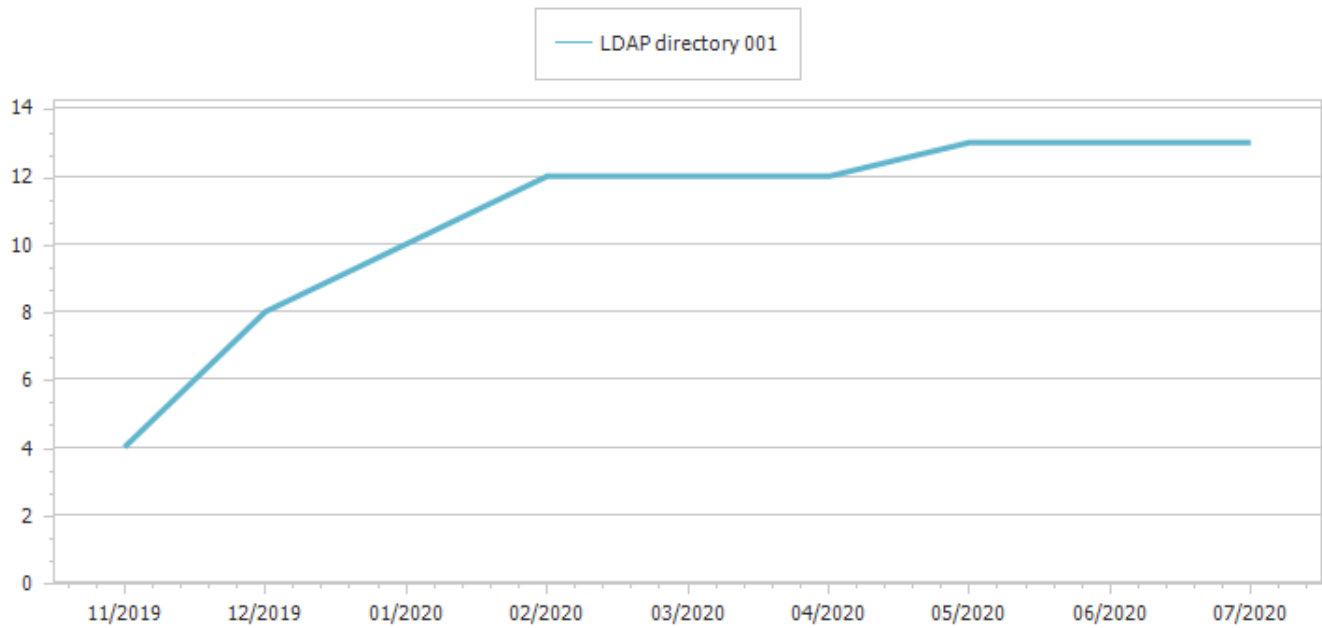
6.15 Users development by mapping

Users development by mapping



6.16 Users development by LDAP directory

Users development by LDAP directory

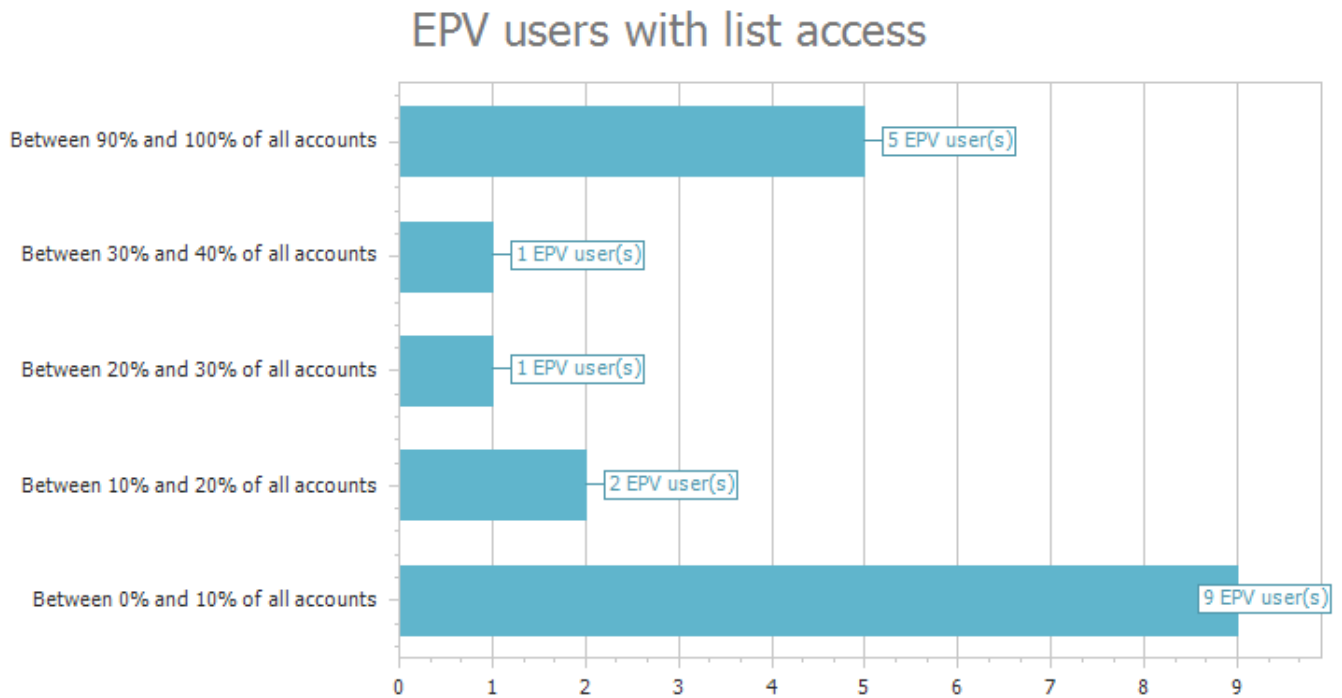


7. Permission management

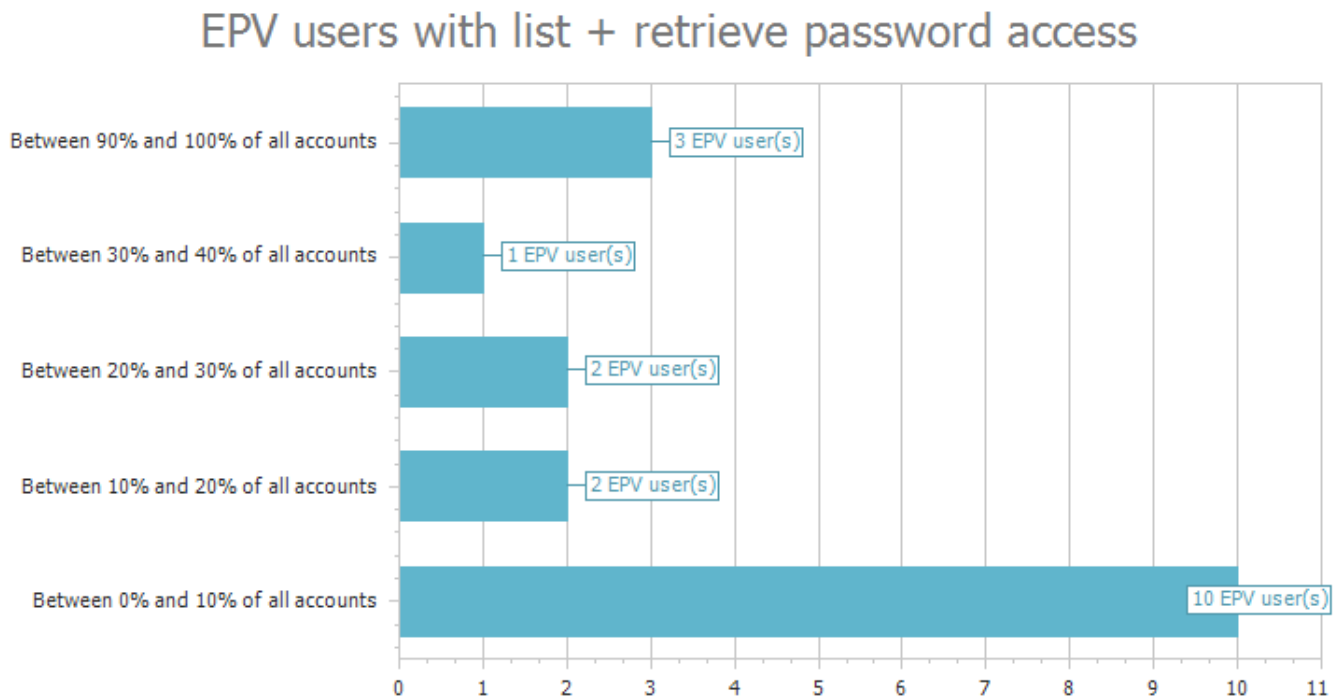
7.1 Permissions statistics

Description	Statistic	Comment
Total number of accounts	104	
Total number of safes	65	
EPV users	17	
Safes with OLAC	3	Note: This is just an indication of safes that might have OLAC enabled since OLAC safes cannot get determined with absolute certainty with EVD data
Accounts in possible OLAC safes	0	0% of all accounts Note: OLAC safes cannot get determined with absolute certainty with EVD data
Average EPV users list access on accounts	36	34.62% of all accounts
Average EPV users list + retrieve password access on accounts	25	24.04% of all accounts
Average EPV users list + retrieve password + w/o confirmation access on accounts	18	17.31% of all accounts
Average EPV users list + use password on accounts	24	23.08% of all accounts
Average EPV users list + use password + w/o confirmation access on accounts	18	17.31% of all accounts
Average AAM Providers access on accounts	6	5.77% of all accounts
Average AAM Providers access on safes	2	3.08% of all safes
Average AAM Applications access on accounts	6	5.77% of all accounts
Average AAM Applications access on safes	2	3.08% of all safes
Average OPM Agents access on accounts	1	0.96% of all accounts
Average OPM Agents access on safes	3	4.62% of all safes

7.2 EPV users with list access on % of all accounts

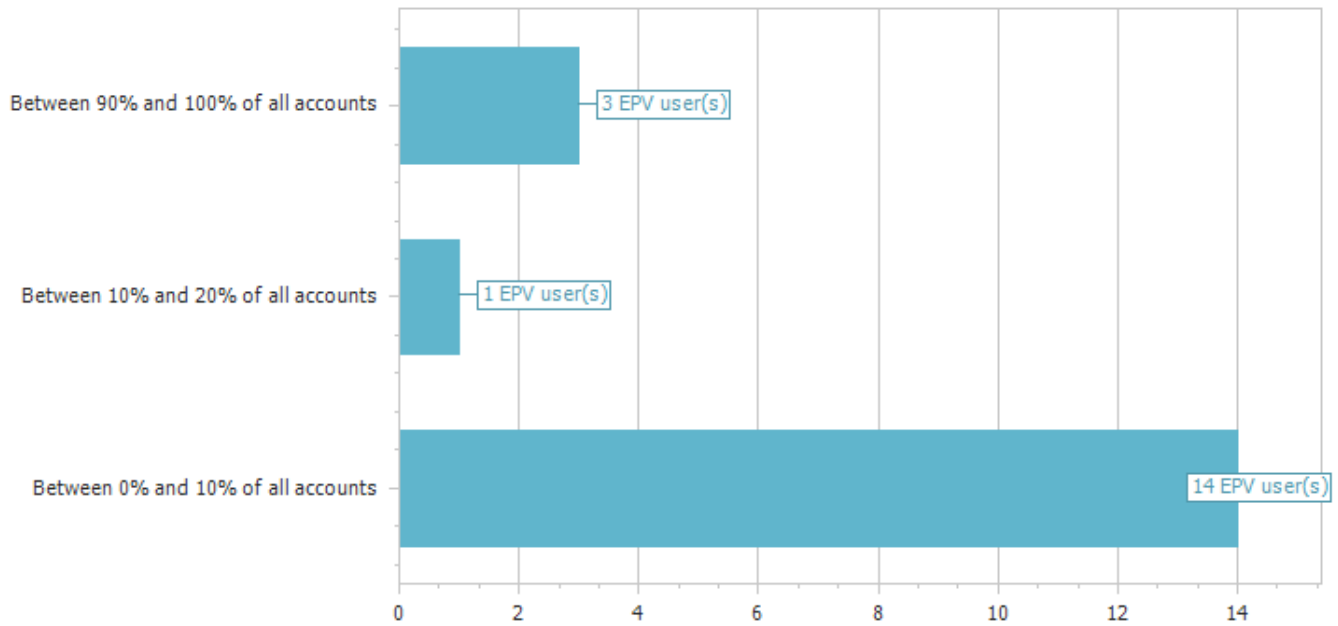


7.3 EPV users with list + retrieve password access on % of all accounts



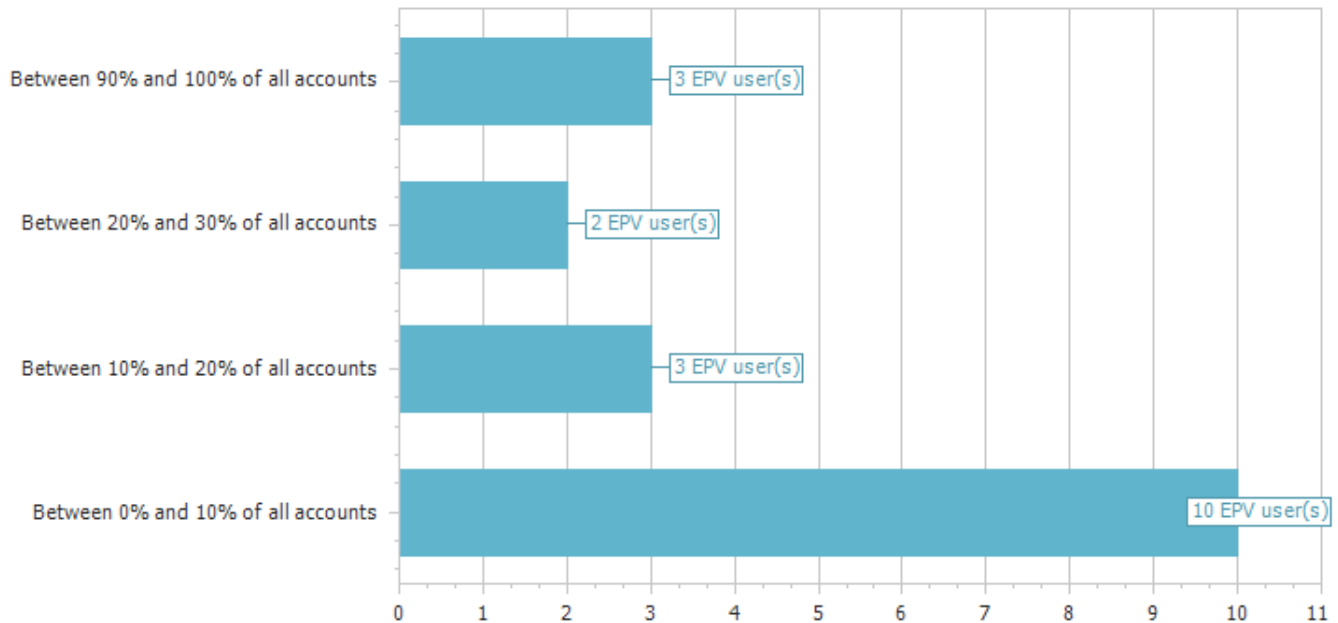
7.4 EPV users with list + retrieve + w/o confirmation access on % of all accounts

EPV users with list + retrieve + w/o confirmation access



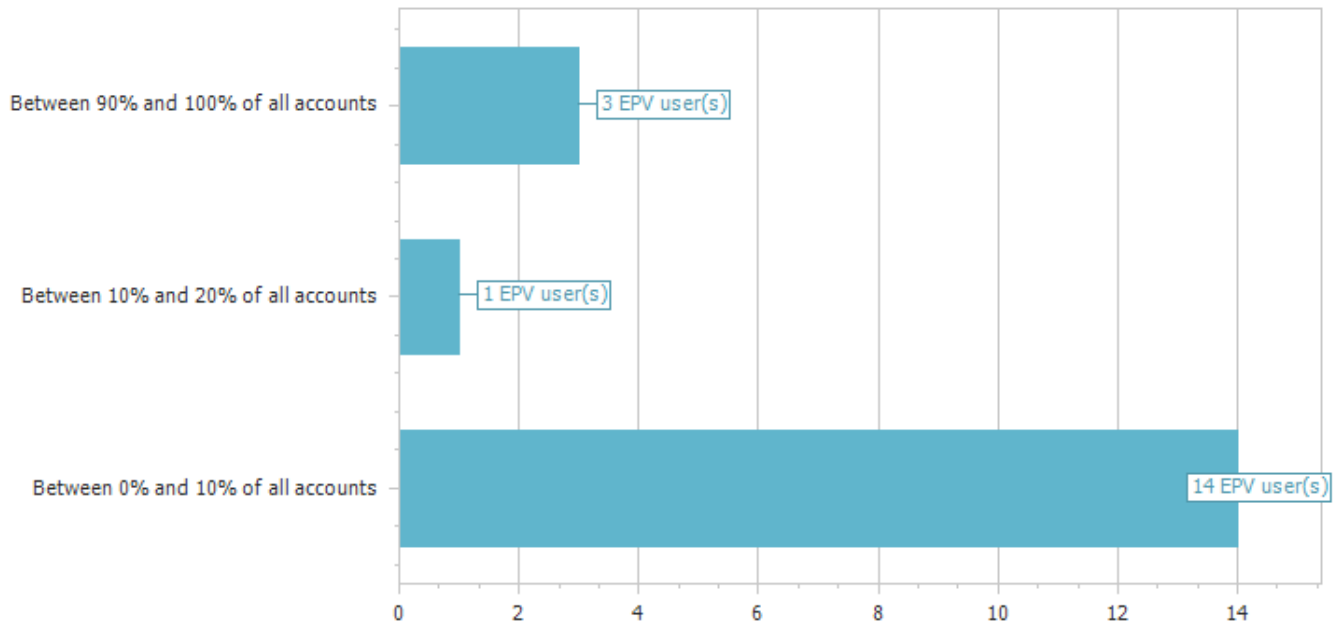
7.5 EPV users with list + use password access on % of all accounts

EPV users with list + use password access



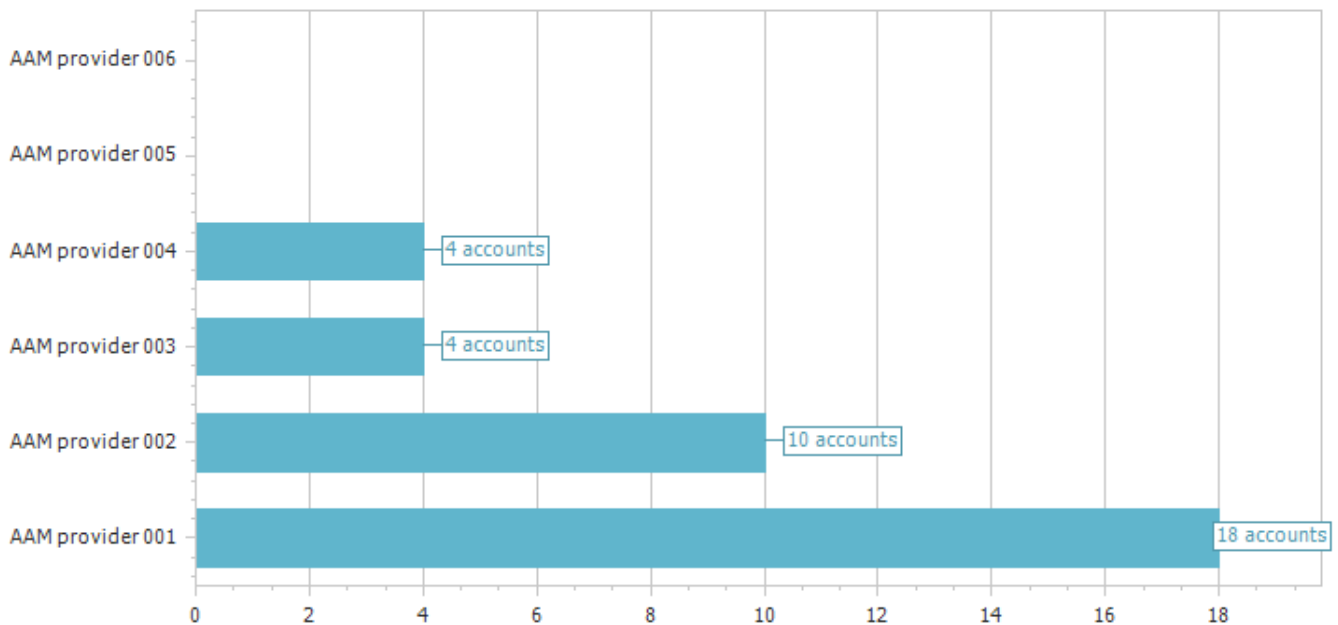
7.6 EPV users with list + use + w/o confirmation on % of all accounts

EPV users with list + use + w/o confirmation access



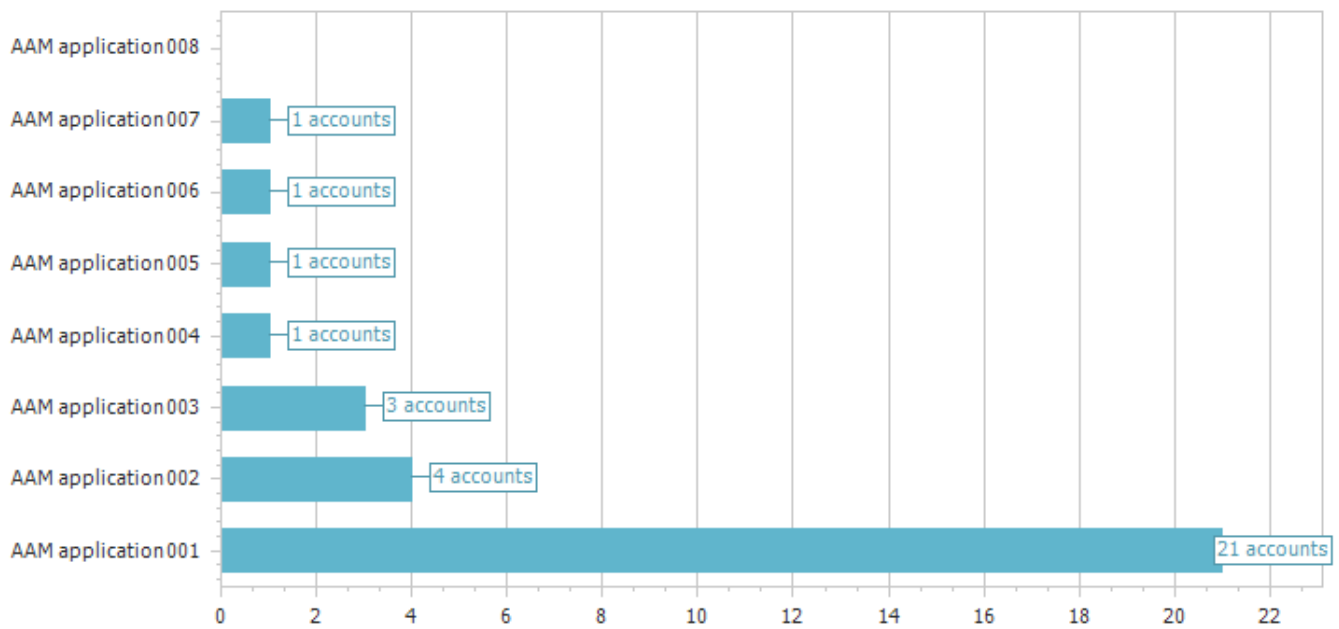
7.7 Accounts per AAM provider

Accounts per AAM provider - Top 10



7.8 Accounts per AAM application

Accounts per AAM application - Top 10



7.9 Accounts per OPM agent

Accounts per OPM agent - Top 10

