



**Pinnacle
Technology
Partners**

September 2022

PEAKPLUS™

MONTHLY
CLOUD REVIEW

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EXECUTIVE SUMMARY

Spend/Savings:

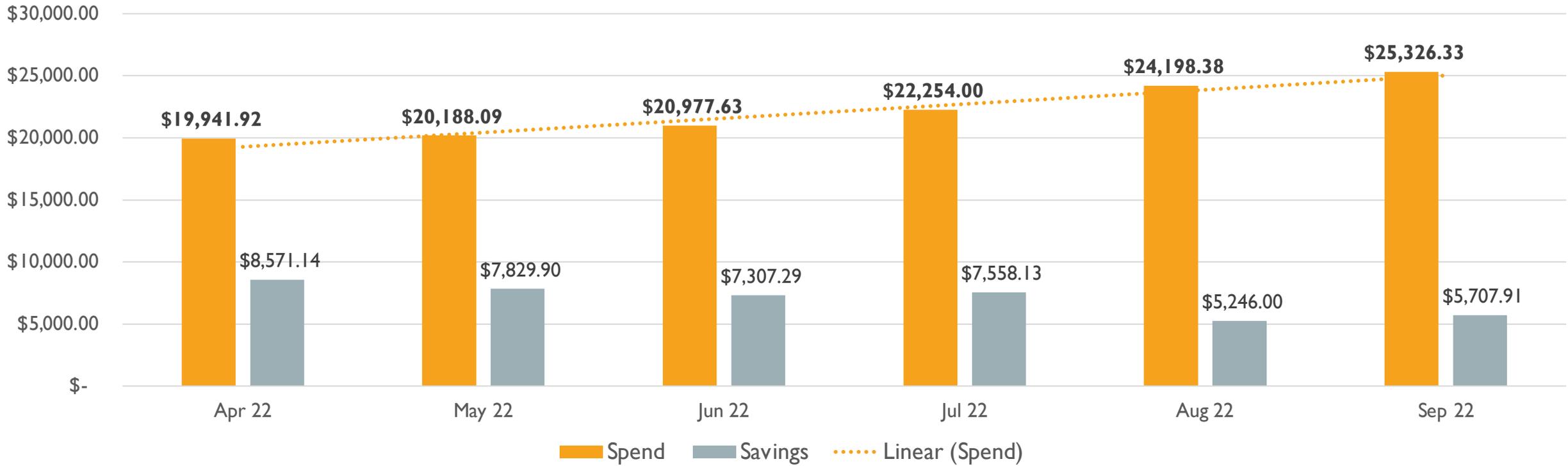
The usual top spend services (EC2 & RDS) stay leveled from previous month. EFS continue to rapidly trend up in the BioInformatics account. S3 & Backup increase 10% & 42%, respectively with a few others usually in the smaller spend (WorkSpaces & SageMaker) spiked quite a bit. The PTP RI program is covering a steady increase in on-demand spend as the coverage rate went up while the RI savings opportunity went down.

Security Configuration Checks:

PTP is evaluating security best practices against the NIST 800-53 security framework, and the controls that apply to the cloud environment. There are additional recommendations from PTP beyond the mapped NIST best practices that are provided in detail in the security section. PTP managing action items for best practice remediation.

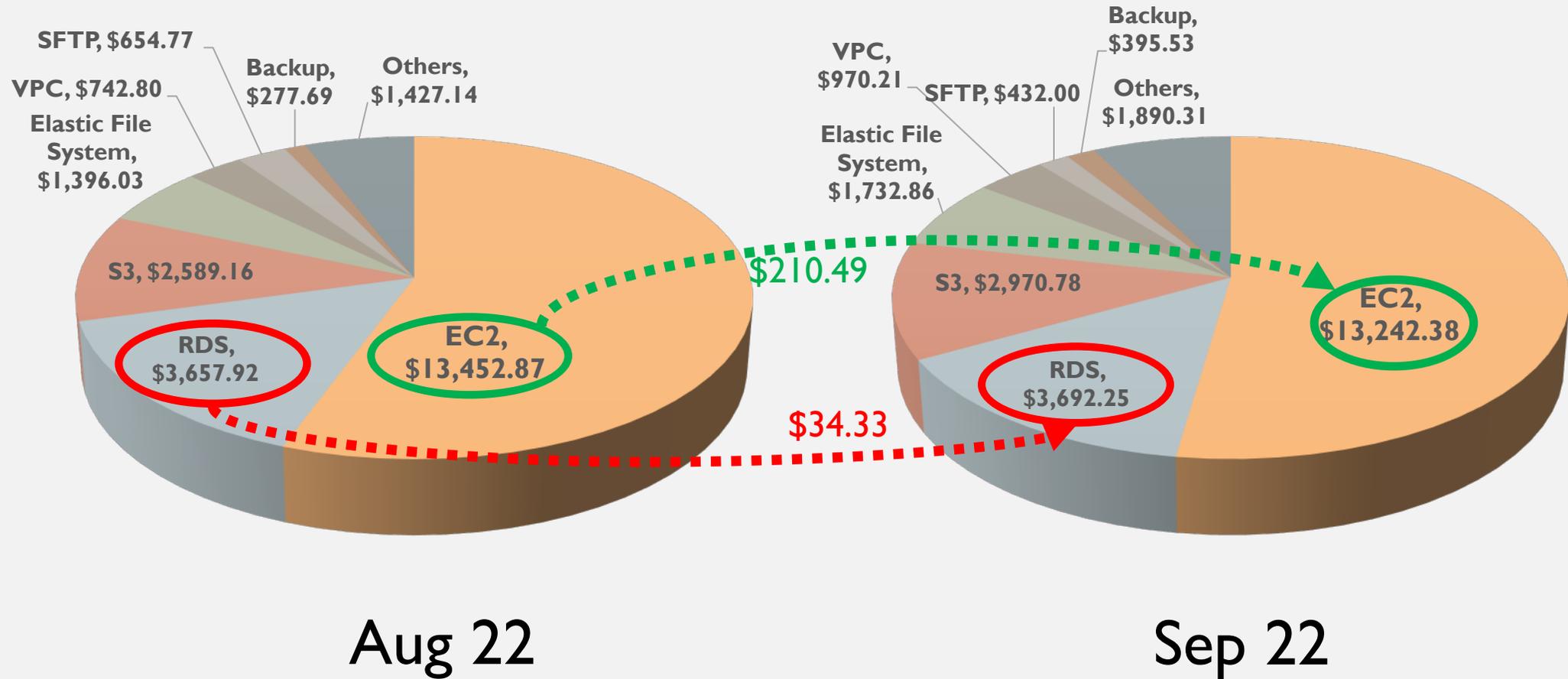
SPEND AND SAVING ANALYSIS

MTM Spend & Savings Trend



SPEND AND SAVINGS TREND

Monthly Spend by Service



Monthly Spend by Service (table)

Services	Amount	Services	Amount
 EC2	\$13,452.87	 EC2	\$13,242.38
 RDS	\$3,657.92	 RDS	\$3,692.25
 S3	\$2,589.16	 S3	\$2,970.78
 Elastic File System	\$1,396.03	 Elastic File System	\$1,732.86
 VPC	\$742.80	 VPC	\$970.21
 SFTP	\$654.77	 SFTP	\$432.00
 Backup	\$277.69	 Backup	\$395.53
 Others	\$1,427.14	 Others	\$1,890.31
Total	\$24,198.38	Total	\$25,326.33

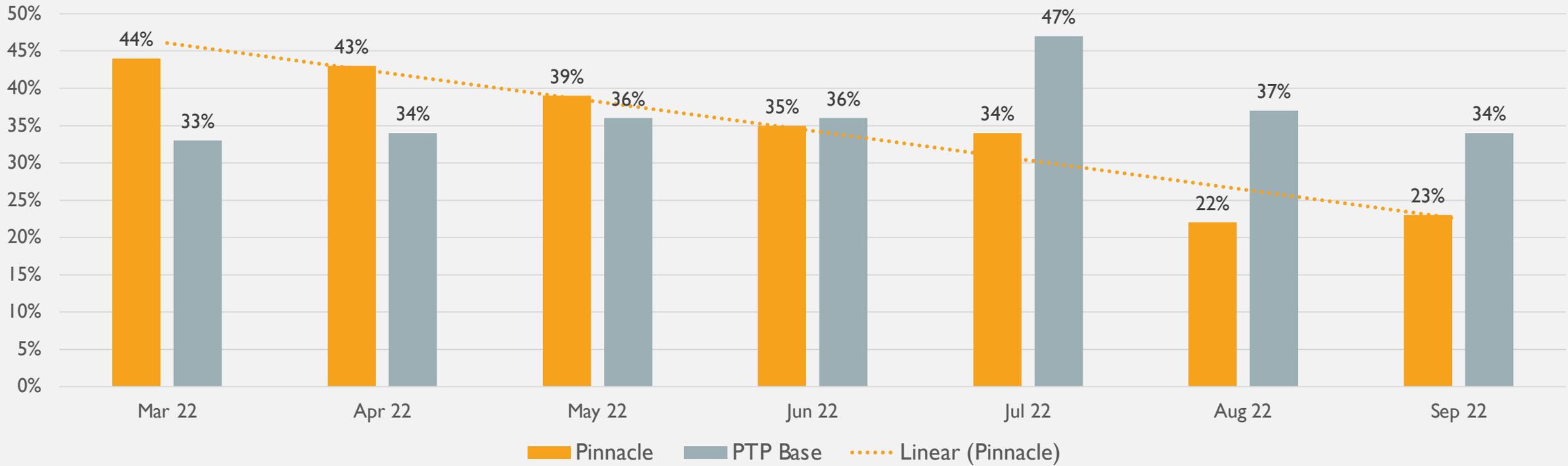
Aug 22

Sep 22

“Others” Spend (Aug vs Sep)

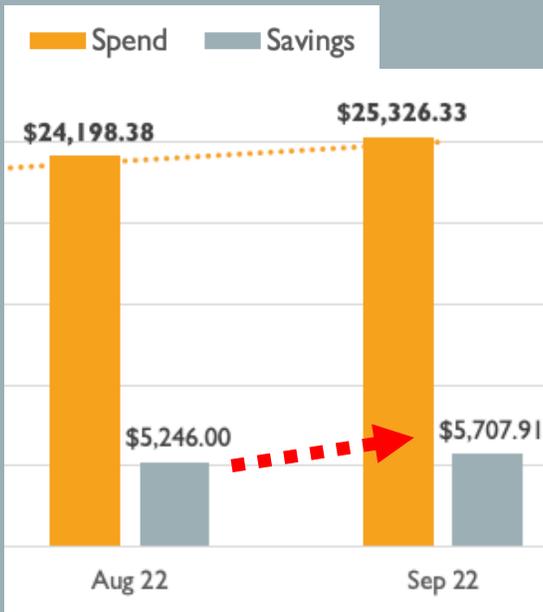
Service	Total	Month	Cost
WorkSpaces	\$465.95		
		Aug 2022	\$133.58
		Sep 2022	\$332.37
CloudWatch	\$450.39		
		Aug 2022	\$243.15
		Sep 2022	\$207.24
SageMaker	\$376.37		
		Aug 2022	\$43.75
		Sep 2022	\$332.62

Pinnacle vs PTP Customer Base – Savings Opportunity



**SAVINGS OPPORTUNITY
COMPARISON TO PTP CUSTOMER AVERAGES**

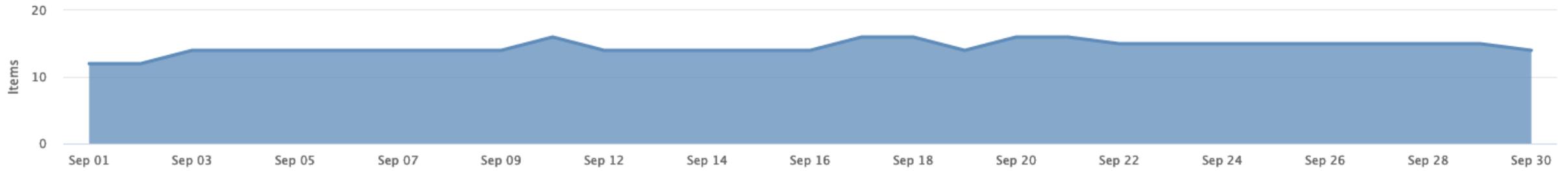
MONTH OVER MONTH SAVINGS OPPORTUNITIES



	Aug Count	Aug Savings Opp	Sep Count	Sep Savings Opp	Savings Opp Change
Reserved Instances	8	\$1,670	9	\$1,755	↑
Idle EC2	0	\$0	0	\$0	→
Idle RDS	5	\$2,382	5	\$2,382	→
Idle ELB	1	\$18	1	\$18	→
Unused Resources	7	\$99	7	\$99	→
EBS on Stopped EC2	12	\$510	14	\$797	↑

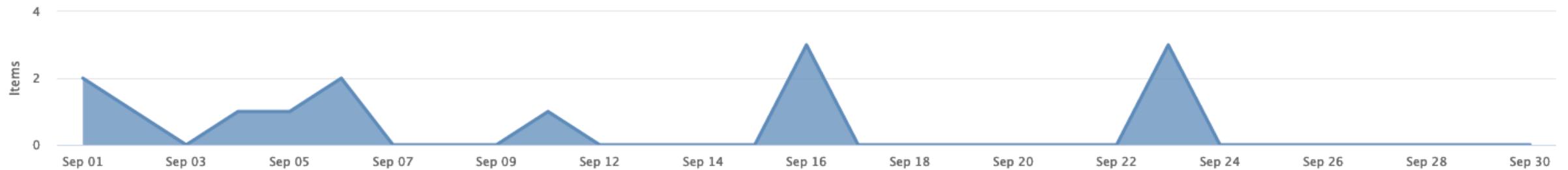
EBS VOLUMES ATTACHED TO STOPPED EC2 INSTANCES

30 Day Trend



IDLE EC2 INSTANCES

30 Day Trend



PTP RI PROGRAM – SAVINGS

Total Saved Over Time

\$3,580

Savings Over Time ⓘ

- Standard Reservations
- Convertible Reservations
- EC2 Savings Plan
- Compute Savings Plan
- Flex Savings Plan
- Sagemaker Savings Plan
- RI Volume Discount

1500

1000

500

0

2022-07-01

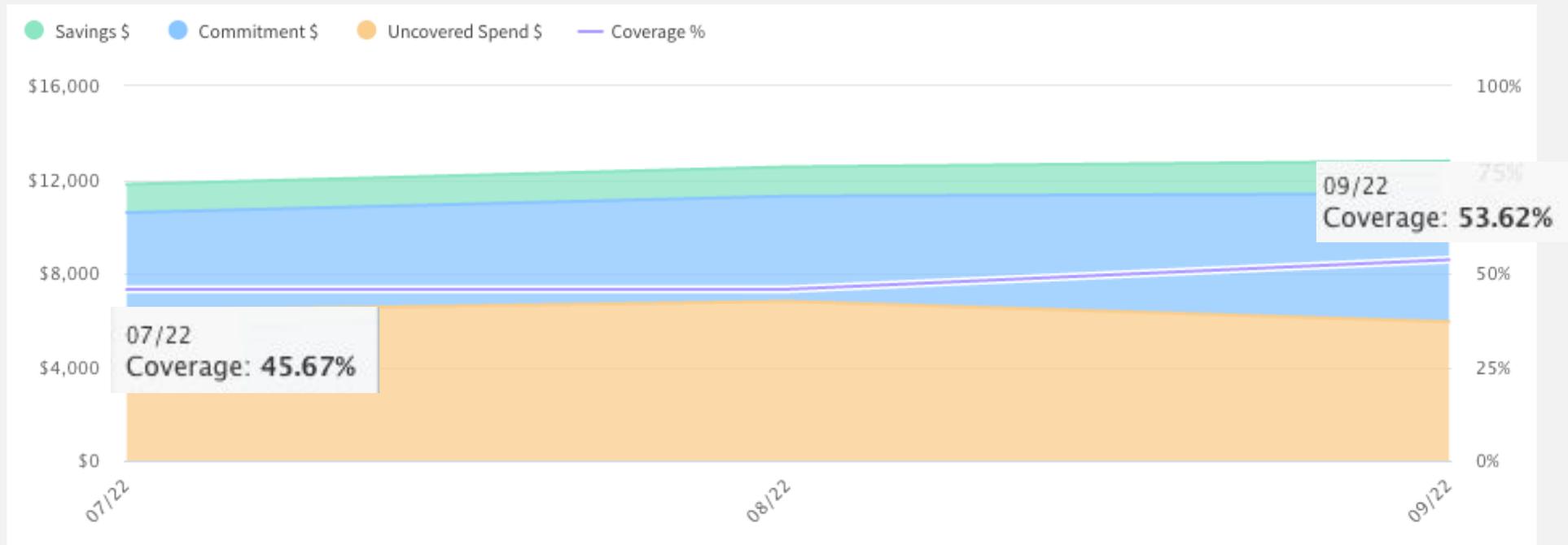
2022-08-01

2022-09-01

2022-09-01
Standard Reservations: **\$836.49**
Total: **\$1,389**

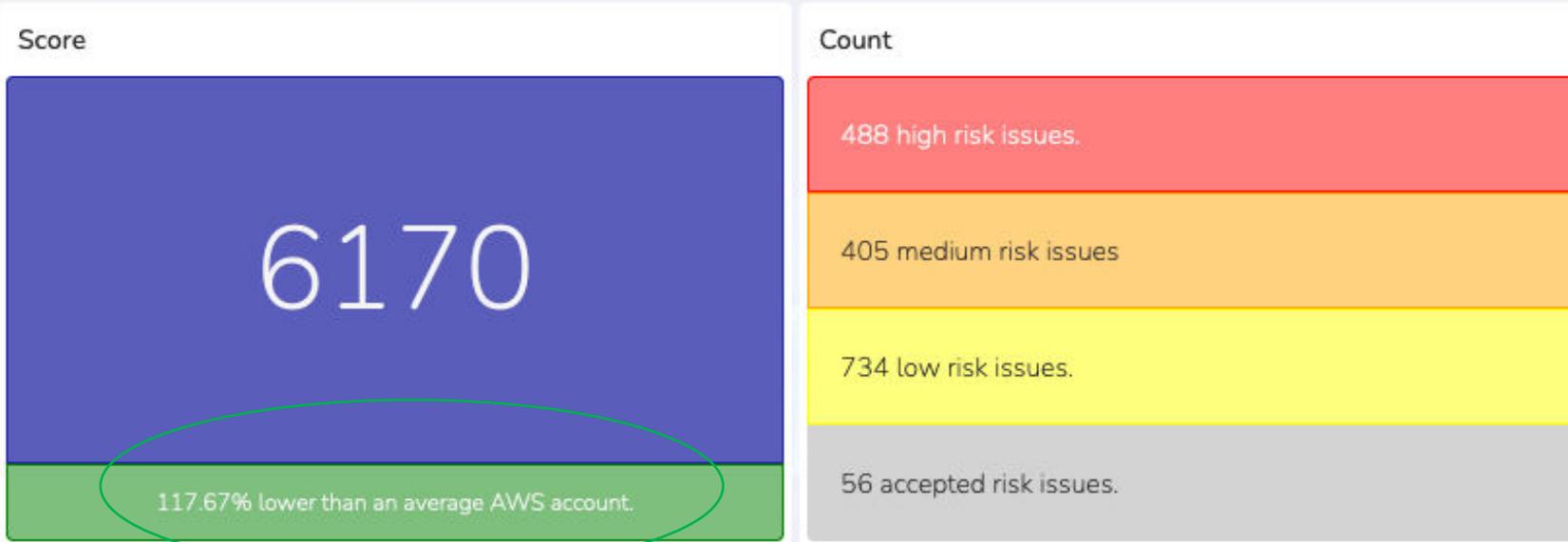
2022-09-01
Convertible Reservations: **\$552.27**
Total: **\$1,389**

PTP RI PROGRAM – COVERAGE

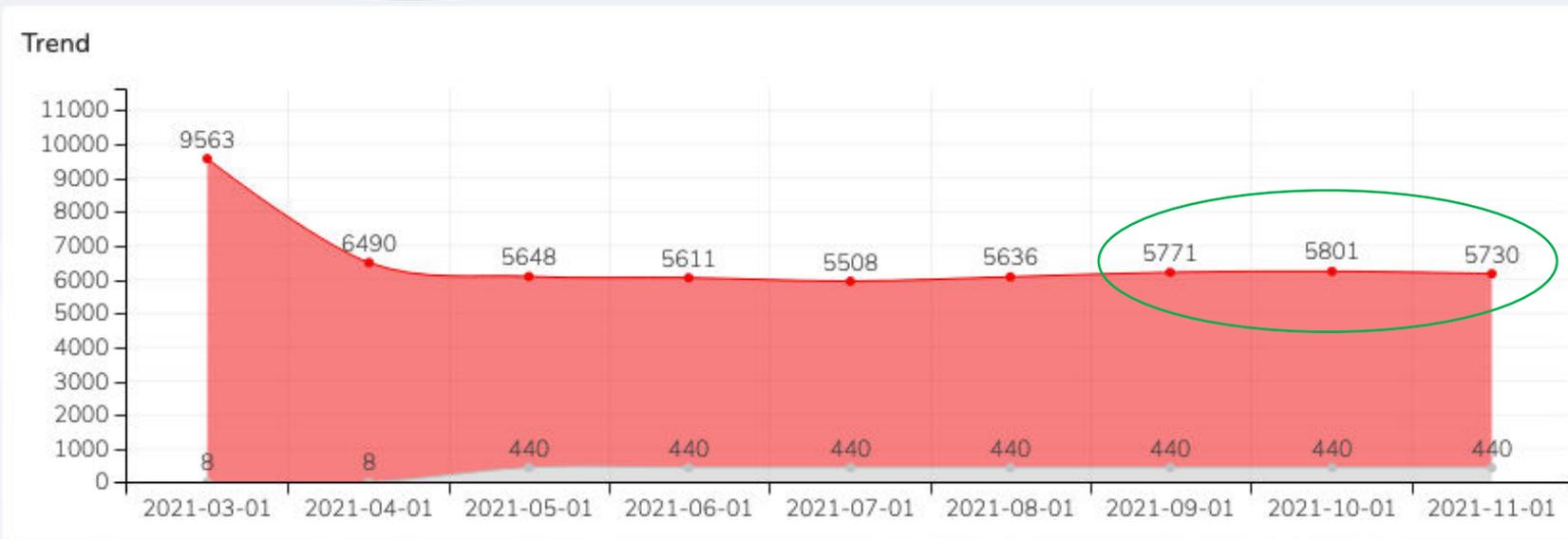


SECURITY BEST PRACTICE ANALYSIS

PeakPlus View – Cloud & Vulnerability



- High Risk (488)
 - (- 2) (490 Sept)
- 117.67 % Lower than average
 - (- 0.75%) (116.92 % Sept)



SECURITY ISSUE REMEDIATION STATUS

Security Issue	Owner	Status
SSO Status/Update	John/Steve	In-Progress – Configured. Contoso setting up users/groups. PTP to assist with permissions as needed.
S3 Access Logging	Steve	Update – PTP looking into enabling. Enabled by default for SG.
S3 Buckets without encryption violations	Steve	Complete
S3 Versioning	PTP/	Update – Versioning updates requested are in place and working. Additions would require expanding the list of file types, Contoso has not indicated need to do so yet.
Key Rotation	Steve	In-Progress – Confirm which keys with John. Steve/John to setup demo for solution.

Security Best Practices Mapped to NIST 800-53

Security Best Practice	Severity	Aug	Sept	Oct
IAM User Policies with Full Admin Privileges	High	10	9	9
IAM Role Policies with Full Admin Privileges	High	66	67	67
IAM Users with Console Access with Initial Access Keys	High	1	0	0
EC2 Instances with Embedded Credentials	High	13	13	13
EC2 Instances without attached IAM Profile Role	High	2	0	1
IAM Policies Granted to IAM Users	Med	31	26	26
CloudTrail logs are not encrypted at rest	Med	0	0	0
Security Questions not Registered	Med	13	13	13

Security Best Practices – PTP Recommendations

Account Issues

Best Practice	PTP Score	Aug	Sep	Oct
IAM Password Policy Disabled	10	0	0	0
IAM Admin Users Not Utilizing Multi-Factor Authentication	10	2	2	1
Root AWS Accounts Not Utilizing Multi-Factor Authentication	10	7	7	7
Passwords not Reset for > 90 Days	8	0	0	1

Security Best Practices – PTP Recommendations

Network Issues

Best Practice	PTP Score	Aug	Sep	Oct
Network ACLs Allowing All Inbound Traffic	8	10	13	13
Blocklisted IP Address Making API Calls	8	0	0	0

Security Best Practices – PTP Recommendations

Cloud Service Issues

Best Practice	PTP Score	Aug	Sep	Oct
S3 Buckets Do Not Have Default Encryption Enabled	8	19	19	18

ADDITIONAL RECOMMENDATIONS FROM PTP

- **Daily cost alerts and thresholds**
 - **Current:**
 - **Daily - \$700**
 - **Monthly - \$21,000**
 - **Daily threshold remains good.**
 - **Projected spend for September is \$25,567. Increased spend is primarily EC2 instances.**



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