



USE CASE GUIDE

HOW TO PERFORM AN INVESTIGATION ON A PRIVILEGED USER

Table of Contents

1	Introduction.....	3
2	Privilege Abuse.....	3
3	Why Investigate a Privileged User?.....	3
4	The Lepide Solution.....	4
5	How to Track the Actions of a Privileged User	4
	5.1 Running the Report	4
6	Support	9
7	Trademarks	9

1 Introduction

Users who have administrative privileges are the most important users within your organization, but they also represent the biggest risk to your data security.

Administrative rights are essential to the efficient running of any IT system as they enable trusted users to perform essential tasks like installing software, adding new accounts, creating passwords and the many other system modifications needed to do their job.

The flip side of this, however, is that admin rights provide the user with the 'keys to the kingdom' and therefore present a huge risk to the security of an organization's data.

2 Privilege Abuse

When a user, either intentionally or accidentally, misuses legitimate privileges they have been granted it is known as privilege abuse. Despite these privileges being legitimately granted, users may access resources or perform actions that compromise data security.

Whether privilege abuse occurs through users purposefully mishandling data, or through employee carelessness, it is a security threat that must be taken seriously.

To be able to monitor any potential threat, it is essential for an organization to have complete visibility over the actions of their privileged users. But without a solution in place, tracking user activity can be a complex and time-consuming task.

3 Why Investigate a Privileged User?

The following scenario of a disgruntled employee is an example of why you might want to track a specific privileged user:

Jill is an administrator of a company and has worked there for just over 15 years. She has always been a very loyal and diligent employee and there has never been any cause to doubt her integrity.

Recently a new managerial job has been created within the company which Jill thinks she is perfect for. Because of her loyalty and hard work, she assumes she will get this position. She goes through the interview process thinking it's just a formality and has her heart set on this new job with more responsibility but with a higher salary and other additional financial benefits.

But Jill does not get the job. A candidate from outside the company is selected and Jill is devastated.

Jill feels angry and resentful of her employers and decides she will resign rather than work for this new manager.

As Jill has admin privileges, she could potentially cause a lot of damage to the company and put their IT systems at a high level of risk. Without a solution in place, it would be almost impossible to track everything that Jill has done and so any malicious activity would go unnoticed until it caused a problem.

4 The Lepide Solution

The Lepide Data Security Platform offers a solution to this scenario. It has functionality to enable you to report on all activities for a particular user over a specified time-period and across all installed components.

In the scenario described in Section 3 above, the company can track all activity for Jill in the weeks leading up to her resignation. If there is any suspicious activity, it can be investigated, and then remedial action taken to mitigate risk and reduce any damage.

5 How to Track the Actions of a Privileged User

All user actions are tracked using the **All Environment Changes Report**

This is a holistic approach whereby all changes are reported across the different components including File Server, Active Directory and Microsoft 365.

5.1 Running the Report

Follow the steps below to run the **All Environment Changes Report**:

- Click the **User and Entity Behavior Analytics**  icon
- The All Environment Changes screen is displayed
- From the tree structure on the left-hand side, click on **All Environment Changes** to display the **All Environment Changes Report**:

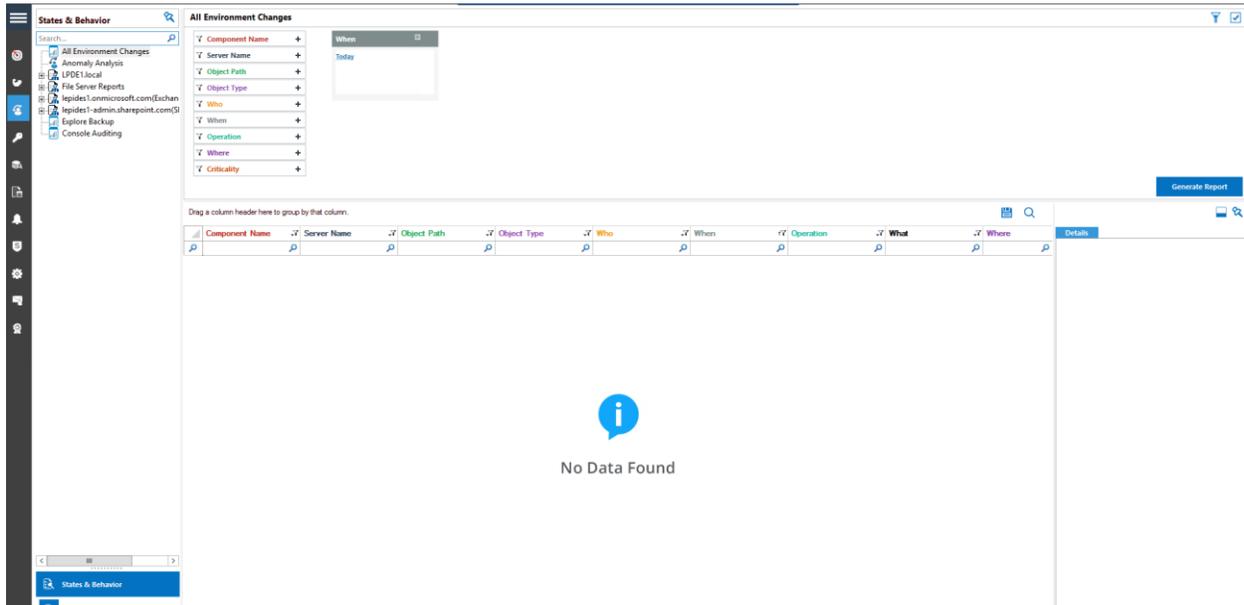


Figure 1: The All Environment Changes Report

5.1.1 Specify a Date Range

- From the top of the screen, under **When** click **Today** to choose a date range for the report

The following dialog box is displayed:

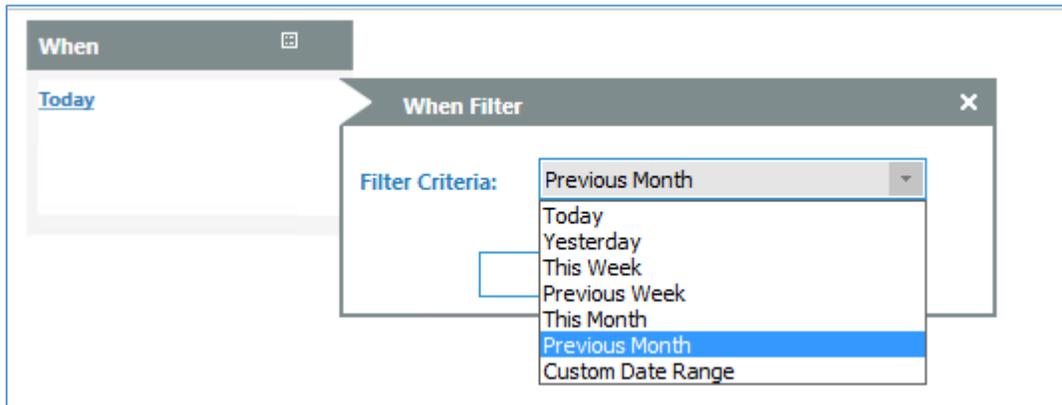


Figure 2: Date Range Filter

- Select a date range from the list
- Click **OK** and you will return to the **All Environment Changes** screen

5.1.2 Specify the User

From the list of filter options, click **Who**

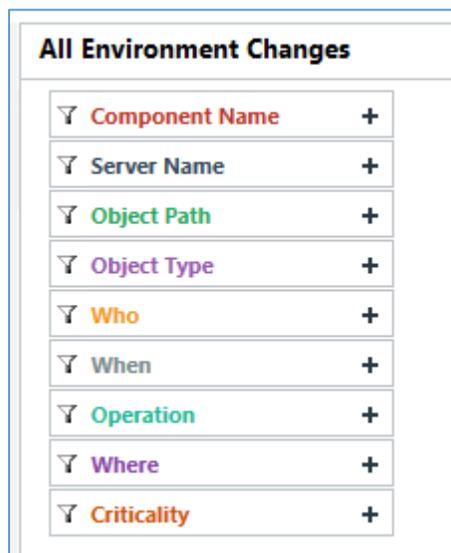


Figure 3: Filter Options

The Who Filter dialog box is displayed:

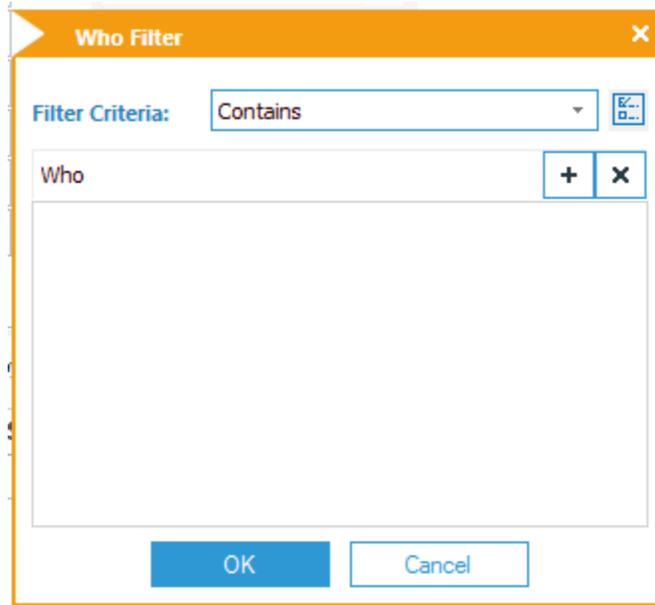


Figure 4: Who Filter

- Click the **+** button to add the name you want to filter by
- Click **OK**
- Click **Generate Report**

In the example below, the report has been filtered on **Previous Month** and **Jill**:

Component Name	Server Name	Object Path	Object Type	Who	When	Operation	What	Where	Criticality
Active Directory	multicoop.local	\\local\multicoop\Users\Jill	Group	MULTICORP-Jill	5/17/2022 1:36:41 PM	Members Added	Members Added: C:\>E:_Contractor\CHI-Users\DC-...	DCBDC001\multicoop.local	High
Group Policy	multicoop.local	Computer Configuration\GPO	Group Policy Container	MULTICORP-Jill	5/17/2022 1:36:30 PM	Setting Added	GPO Settings - User or Group Name Old Value - New V...	DCBDC001\multicoop.local	Medium
Active Directory	multicoop.local	\\local\multicoop\Users\Ed_...	User	MULTICORP-Jill	5/17/2022 1:36:24 PM	Password Reset Attempted	Password Reset Attempted	DCBDC001\multicoop.local	Medium
Active Directory	multicoop.local	\\local\multicoop\Users\Ed_...	User	MULTICORP-Jill	5/17/2022 1:36:24 PM	Properties Modified	Properties Modified: [User-Account Control] Modified :	DCBDC001\multicoop.local	Medium
Active Directory	multicoop.local	MULTICORP-Ed_Contractor	User	MULTICORP-Jill	5/17/2022 1:36:22 PM	Unlocked	Unlocked	N/A	Medium
Active Directory	multicoop.local	MULTICORP-Ed_Contractor	User	MULTICORP-Jill	5/17/2022 1:36:20 PM	Enabled	Enabled	N/A	Medium
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Modified (Allowed)	File Read: E:\Multicoop\Technology\IT\Network Data...	FS001	Medium
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Read (Allowed)	File Read: E:\Multicoop\Technology\IT\Network Data...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Deleted (Allowed)	File Deleted: E:\Multicoop\Technology\IT\Network Data...	FS001	High
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Read (Allowed)	File Read: E:\Multicoop\Technology\IT\Network Data...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Read (Allowed)	File Read: E:\Multicoop\Technology\IT\Network Data...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:41 PM	Deleted (Allowed)	File Deleted: E:\Multicoop\Technology\IT\Network Data...	FS001	High
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:38 PM	Read (Allowed)	File Read: E:\Multicoop\Technology\IT\Network Data...	FS001	Medium
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:37 PM	Read (Allowed)	File Read: E:\Multicoop\Technology\IT\Network Data...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:37 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:36 PM	Read (Allowed)	File Read: E:\Multicoop\Technology\IT\Network Data...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:36 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:34 PM	Deleted (Allowed)	File Deleted: E:\Multicoop\Technology\IT\Network Data...	FS001	High
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:34 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low
File Server	FS001	E:\Multicoop\Technology\IT...	File	MULTICORP-Jill	5/17/2022 1:35:32 PM	Content View (Allowed)	File Content View: E:\Multicoop\Technology\IT\Network...	FS001	Low

Figure 5: All Environment Changes Report with Filters

The report shows all system activity for **Jill** in **May** and includes some actions that require further investigation.

If we analyze the extract below, we can see a pattern of suspicious behavior:

- We can see that an external contractor account was enabled, and the account was then unlocked
- Immediately after this, we can see the password was reset on the account
- Following this, the accounts privileges have been escalated by adding it to the domain admins group
- Finally, we can see a modification to the security settings of a Group Policy object whereby the account has now been given remote login rights.

Object Path	Object Type	Who	When	Operation	What	Where
Vocal\multicorp\Users\Dom...	Group	MULTICORP\jill	5/17/2022 1:36:41 PM	Members Added	Members Added : CN=Ext_Contractor,CN=Users,DC=m...	DCBDC001.mult
Computer Configuration(Ena...	Group Policy Container	MULTICORP\jill	5/17/2022 1:36:30 PM	Setting Added	GPO Settings : User or Group Name Old Value : New V...	DCD002.multico
MULTICORP\Ext_Contractor	User	MULTICORP\jill	5/17/2022 1:36:24 PM	Password Reset Attempted	Password Reset Attempted	N/A
Vocal\multicorp\Users\Ext_...	User	MULTICORP\jill	5/17/2022 1:36:24 PM	Properties Modified	Properties Modified : [User-Account-Control] Modified : ...	DCBDC001.mult
MULTICORP\Ext_Contractor	User	MULTICORP\jill	5/17/2022 1:36:22 PM	Unlocked	Unlocked	N/A
MULTICORP\Ext_Contractor	User	MULTICORP\jill	5/17/2022 1:36:20 PM	Enabled	Enabled	N/A
E:\Multicorp\Technology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Modified (Allowed)	File Modified : E:\Multicorp\Technology\IT\Network Dat...	FS001

Figure 6: Extract of Report

5.1.3 Details Window

To see more information about a particular event in the report, select the row containing the event and click Details to display the details window:

The screenshot shows a report table with a 'Details' window open on the right side. The table lists various system events, and the details window provides a breakdown of a specific event.

Object Type	Who	When	Operation	What
ers\Dom...	Group	MULTICORP\jill	5/17/2022 1:36:41 PM	Members Added
ation(Ena...	Group Policy Container	MULTICORP\jill	5/17/2022 1:36:30 PM	Setting Added
Contractor	User	MULTICORP\jill	5/17/2022 1:36:24 PM	Password Reset Attempted
ers\Ext_...	User	MULTICORP\jill	5/17/2022 1:36:24 PM	Properties Modified
Contractor	User	MULTICORP\jill	5/17/2022 1:36:22 PM	Unlocked
Contractor	User	MULTICORP\jill	5/17/2022 1:36:20 PM	Enabled
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Modified (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Read (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Content View (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Content View (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Deleted (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Read (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Content View (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Deleted (Allowed)
nology\IT...	File	MULTICORP\jill	5/17/2022 1:35:41 PM	Read (Allowed)

Details

- Component Name: File Server
- Server Name: FS001
- Object Path: E:\Multicorp\Technology\IT\Network Data\--SS
- Object Type: File
- Who: MULTICORP\jill
- When: 5/17/2022 1:35:41 PM
- Operation: Deleted (Allowed)
- Where: FS001
- Criticality: High
- What: File Deleted: E:\Multicorp\Technology\IT\Network Data

Figure 7: Report with Details Window Displayed

6 Support

If you are facing any issues whilst installing, configuring, or using the solution, you can connect with our team using the contact information below.

Product Experts

USA/Canada: +1(0)-800-814-0578

UK/Europe: +44 (0) -208-099-5403

Rest of the World: +91 (0) -991-004-9028

Technical Gurus

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UK/Europe: +44 (0) -208-099-5403

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Alternatively, visit <https://www.lepide.com/contactus.html> to chat live with our team. You can also email your queries to the following addresses:

sales@Lepide.com

support@Lepide.com

To read more about the solution, visit <https://www.lepide.com/data-security-platform/>.

7 Trademarks

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