Monitoring System - Use cases

ID and name	UC-1: Computer scan		
Primary actor	Program User	**Secondary actors**	Operating System Monitoring System
Description	The program user should be able to initiate a computer scan at any time. It can be stopped by the user or by the administrator at any time. If the administrator is the one initiating the scan, the user can not stop it. Once the scan is completed, the results are shown including the safe processes and the less safe/unsafe ones. The user can perform some actions for the latter processes.		
Trigger	The user requests a computer scan by clicking the 'Scan computer' button.		
Preconditions	Pre-1: The user is logged into the program. Pre-2: The user has a valid license for the program.		
Postconditions	Post-1: The user can see the scan results. Post-2: The user is able to perform actions on less safe/unsafe processes.		
Normal flow	1.0 **Computer scan** 1. The user logs in to view the Computer scan section. 2. The user starts the scan by pressing the 'Scan computer' button and waits for the results. 3. The results are shown in the results section and the user can take actions on some processes he considers.		
Alternative flows	1.1 **Multiple computer scans** 1. The user wants another scan after a scan has already been completed. 2. Return to step 2 of normal flow.		
Exceptions	None		

ID and name	UC-2: Administrate users		
Primary actor	Program Administrator	**Secondary actors**	Monitoring System Program User

Description	The administrator should be able to view all the users computers' status and to initiate a computer scan for any of the users at any time. It can not be stopped by the user but by the administrator at any time.
Trigger	The administrator enters this zone via log in.
Preconditions	Pre-1: The user is logged into the program and has administrator privileges.
Postconditions	Post-1: The administrator can see all the user's status, licenses and actions performed. Post-2: The user is able to start/stop a computer scan for any of the users. Post-3: The taken actions for users are recorded in the database.
Normal flow	2.0 **User's Computer scan** 1. The administrator selects a user and starts the scan for him. 2. The administrator is the only one who can stop the scan. 3. The administrator waits the scan to complete. 4. The results are shown in the results section and the administrator can take actions on some user's processes he considers. 5. The program perform the action specified by the administrator. (see 2.0.E1) 6. The program sends the action taken to the server. 7. The program updates the results after the action is performed.
Alternative flows	2.1 **Multiple computer scans** 1. The administrator wants another scan after he had taken some actions for processes of the previous scan. 2. Return to step 1 of normal flow.
Exceptions	2.0.E1 **Action denied** 1. The program informs the administrator that the selected action can not be performed on the considered process due to process is vital to the system. 2. The administrator has to reconsider the action he wants to perform.

ID and name	UC-3: Log In		
Primary actor	Computer User	**Secondary actors**	Monitoring System

Description	The computer user must authenticate in order to use the program. He needs a valid username and password. A valid license is not necessarily needed.
Trigger	The computer user starts the program.
Preconditions	Pre-1: The computer user is not currently logged in.
Postconditions	Post-1: The computer user is now a program user. Post-2: The program user can initiate a scan.
Normal flow	3.0 **Log In** 1. The computer user starts the program. 2. The user specifies its username and password and clicks the log in button. (see 3.0.E1) 3. The computer user is logged in and can use the program.
Alternative flows	None
Exceptions	3.0.E1 **User is already logged in** 1. The program informs the computer user that there is an active instance where it is logged in. 2. The user has to use the active session.

ID and name	UC-4: Register		
Primary actor	Program Administrator	**Secondary actors**	Monitoring System Program User
Description	The administrator should be able to register an account for a normal user. He can not modify or delete details of the account after the creation has been done.		
Trigger	The administrator clicks the 'Create account' button found in the Administrator's panel.		
Preconditions	Pre-1: The user is logged into the program and has administrator privileges. Pre-2: The administrator enters valid credentials for the new account.		
Postconditions	Post-1: The account is created and can be used to log in. Post-2: The administrator sees the new user in the users list.		

Normal flow	4.0 **Register account** 1. The computer user starts the program. 2. The user specifies its username and password and clicks the log in button. (see 4.0.E1) 3. The program user is logged in having the administrator privileges and can use the program. 4. The administrator clicks the 'Create account' button and enters valid credentials for the new account. (see 4.0.E2) 5. The account is created and can be used to log in by a user.
Alternative flows	None
Exceptions	4.0.E1 **User is already logged in** 1. The program informs the computer user that there is an active instance where it is logged in. 2. The user has to use the active session. 4.0.E2 **Credentials are not valid or already taken** 1. The program informs the computer user that the entered credentials are not valid or already in use. 2. The user has to enter another set of credentials.

ID and name	UC-5: View results		
Primary actor	Program User	**Secondary actors**	Operating System Monitoring System
Description	The program user should be able to see details for every process on the system. The running processes are shown in the Results list after a scan has been performed. The details the user sees are meant to help with threat intelligence.		
Trigger	The user selects a process by clicking it in the list and then the 'Detail view' button.		
Preconditions	Pre-1: The user is logged into the program. Pre-2: The user has a valid license for the program. Pre-3: A scan has already been performed.		

Postconditions	Post-1: The user can see the scan results. Post-2: The user is able to perform actions on less safe/unsafe processes. Post-3: The taken actions are recorded in the database.
Normal flow	5.0 **View results** 1. The user logs in to view the Computer scan section. 2. The user has already performed a scan and sees the results. 3. The user selects a process to view the details for and the 'Detail view' button gets enabled. 4. The user clicks the 'Detail view' button and a separate window with details for the process selected is shown.
Alternative flows	5.1 **Detail view for multiple processes** 1. The user wants to see details for another process. 2. Return to step 3 of normal flow.
Exceptions	None

ID and name	UC-6: Take actions		
Primary actor	Program User	**Secondary actors**	Operating System Monitoring System
Description	The program user should be able to take several actions to processes he considers. Some actions might be denied due to low privileges or protected processes that are vital to the system.		
Trigger	The user selects a process by clicking it in the list and then selects the action from the actions group. After both are selected, the user clicks the 'Take action' button.		
Preconditions	Pre-1: The user is logged into the program. Pre-2: The user has a valid license for the program. Pre-3: A scan has already been performed.		

Postconditions	Post-1: The user can see either the selected action taken for the considered process or a message denying the action. Post-2: All the logged users see the updated list with processes after the action has been performed. Post-3: The taken action is recorded in the database.
Normal flow	6.0 **Take action on process** 1. The user logs in to view the Computer scan section. 2. The user has already performed a scan and sees the results. 3. The user selects a process and an action to be performed on that process. 4. The user clicks the 'Take action' button and waits either for the action to be performed or an denying informative message. (see 6.0.E1)
Alternative flows	6.1 **Multiple actions to be taken** 1. The user wants to perform an action multiple times for the same process or for other processes. 2. Return to step 3 of normal flow.
Exceptions	6.0.E1 **Action denied** 1. The program informs the program user that the selected action can not be performed on the considered process due to several reasons: process is vital to the system or higher privileges are required. 2. The user has to reconsider the action he wants to perform.