# Task Analysis Guidelines

There are two parts to these guidelines for conducting task analyses:

1. What Task Analysis Is
2. How to Conduct a Task Analysis

The first time you reference these guidelines, read them all the way through to ensure you understand *what* task analyses are before you do one yourself.

Later, you will likely be able to skip right to the second part.

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## What Task Analysis Is

Task analysis is a way to get a more complete understanding of exactly how tasks within a workflow are completed through the following process:

* Identifying the user’s goal
* Determining which tasks should be completed in sequence to achieve the goal
* Breaking down those tasks into meaningful parts (or subtasks)

Task analysis allows development, role managers, and the UX team to see where additional support may be needed or where the process of completing a workflow can be streamlined.

### Goals: *Why* a User Does this Workflow

Goals are anything the user might be trying to achieve in pursuit of accomplishing a larger industry process.

An appropriate user goal should have a level of detail somewhere between a larger industry process and specific engineering tasks.

A goal should never mention any software. The user’s goal is to solve some sort of problem, and software applications are *how* the user completes the workflow to accomplish their goal.

### Tasks: *What* a User Does to Achieve their Goal

Tasks are discrete actions taken by the user to achieve their goal.

An appropriate task has a level of detail somewhere between achieving the identified user goal and using specific software functionality or tools.

As with goals, tasks should be described without referring to specific software. Think about what the user has to do in engineering or simulation terms; remember that they could accomplish these tasks using any company’s software.

### Subtasks: *How* a User Completes a Task

Subtasks are smaller actions taken to complete a higher-level task.

An appropriate subtask describes how to complete a task using DS app functionality or other non-3DS tools, like scripts or third-party software applications. One or more subtasks constitute each task.

## How to Conduct a Task Analysis

If only **one user** is involved in this workflow, use the form titled “One-User Workflow” on page 3.

If **multiple users** are involved in this workflow, use the form titled “Multiple-User Workflow” on page 4.

If you need to record more steps than there are rows, right-click the last row in the table, click “Insert”, and then click “Insert Rows Below”. Then, copy the content from the previous row and change the step number as applicable.

If you have fewer steps than there are rows, highlight the empty rows, right-click them, click “Delete Cells”, and then select “Delete entire row” and press “OK”.**One-User Workflow**

|  |  |
| --- | --- |
| **Goal** What (software-agnostic) goal is the user trying to achieve?  ***Why* is the user doing this workflow?** | Click to enter text. |
| **User**  ***Who* is the user doing this workflow?**  (Review the user profiles.) | Click to select a user. |
| **Additional Knowledge** To achieve their goal, does the user need to have any additional or specialized skills (beyond those laid out in their profile)? If so, explain them here. | Click to enter text. |

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| --- | --- | --- | --- |
| **Step** | **Task Title**  3-7 word ‘headline’ for task, starting with a verb | **Task Description** 1-2 sentence description of task (remember: no software!) ***What* is the user doing to achieve their goal?** | **Subtasks** Apps & other tools or data needed for task  ***How* is the user completing this task?** |
| **1** | Click to enter text. | Click to enter text. | Click to enter text. |
| **2** | Click to enter text. | Click to enter text. | Click to enter text. |
| **3** | Click to enter text. | Click to enter text. | Click to enter text. |
| **4** | Click to enter text. | Click to enter text. | Click to enter text. |
| **5** | Click to enter text. | Click to enter text. | Click to enter text. |
| **6** | Click to enter text. | Click to enter text. | Click to enter text. |
| **7** | Click to enter text. | Click to enter text. | Click to enter text. |
| **8** | Click to enter text. | Click to enter text. | Click to enter text. |
| **9** | Click to enter text. | Click to enter text. | Click to enter text. |
| **10** | Click to enter text. | Click to enter text. | Click to enter text. |

**Multiple-User Workflow**

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| --- | --- |
| **Goal** What (software-agnostic) goal are the users trying to achieve? ***Why* are the users doing this workflow?** | Click to enter text. |

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| --- | --- | --- | --- | --- |
| **Step** | **User**  User responsible for completing task (Review the user profiles.) | **Task Title**  3-7 word ‘headline’ for task, starting with a verb | **Task Description** 1-2 sentence description of task (remember: no software!)  ***What* is the user doing to achieve their goal?** | **Subtasks** Apps & other tools or data needed for task  ***How* is the user completing this task?** |
| **1** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **2** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **3** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **4** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **5** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **6** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **7** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **8** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **9** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |
| **10** | Click to select a user. | Click to enter text. | Click to enter text. | Click to enter text. |