

Data management

Terre des hommes regional training

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A stylized, light gray globe icon showing the continents of North and South America, positioned on the left side of the slide. The globe is partially cut off by the edge of the frame.

Data management basic principles

Importance of the unique identifier

- ❶ The unique identifier is essential:
 - To avoid duplicates (errors of capture or double follow-up)
 - To allow for individual monitoring of each beneficiary (or infrastructure etc)
- ❷ It is the backbone of your databases!
- ❸ You must reflect on:
 - how you set it up (keep as simple as possible while keeping each element unique)
 - How to refer to it in all your data collection tools
- ❹ Example: region-district-village-automaticnumber (to adapt to your context)
- ❺ This will be essential:
 - for data protection, to separate PII and sensitive data
 - To facilitate any long term follow up of the beneficiary/ infrastructure etc



Archiving / backup of data

- ❗ Make sure you have asked yourself all the following questions and have answered them accordingly:
 - How do you archive your data? On your computer? On an external disk? On the cloud?
 - Do you also have backups? How often? How serious would it be if the data was lost?
 - Do you keep a data dictionary? Are variables, documents, folders named and structured in a meaningful fashion?
 - If you left Tdh today, would someone opening your database / project folders be in a position to understand it? If not, make them understandable!

Data security



Share a view-only form



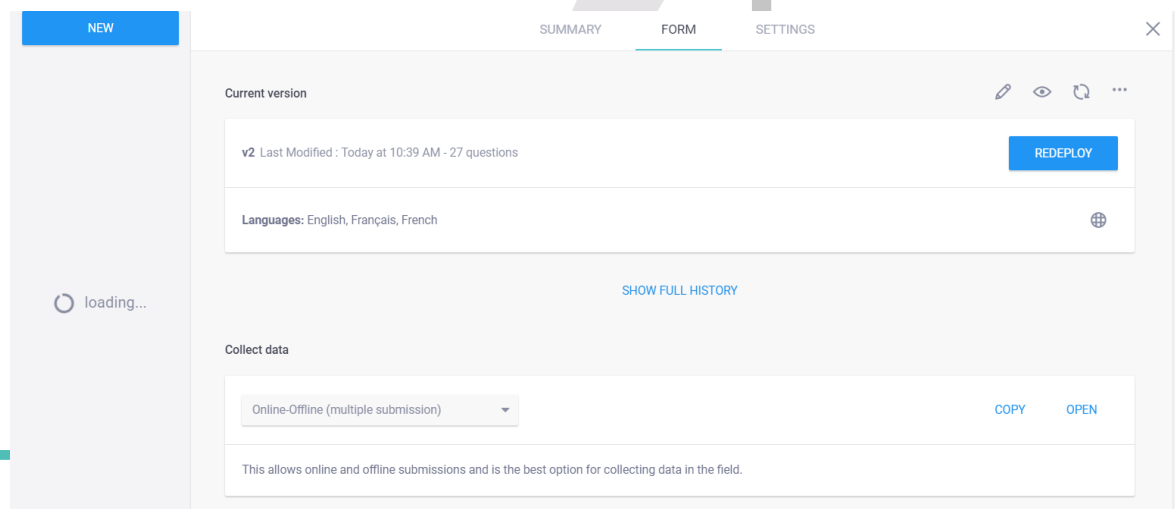
Without edition rights:

- Select a project
- Under “Collect data”, select “View only”
- Clic “Open”
- Copy the URL of the form and past it to others

The screenshot displays a web interface for managing forms. On the left, a sidebar shows a 'NEW' button and three categories: 'Deployed' (5 items), 'Draft' (2 items), and 'Archived' (0 items). The main content area has three tabs: 'SUMMARY', 'FORM' (selected), and 'SETTINGS'. Under the 'FORM' tab, there is a 'Current version' section with a 'REDEPLOY' button. Below this, it shows 'v2 Last Modified : Today at 10:39 AM - 27 questions' and 'Languages: English, Français, French'. A 'SHOW FULL HISTORY' link is also present. The 'Collect data' section features a dropdown menu set to 'View only' and 'COPY' and 'OPEN' buttons. A warning message at the bottom states: 'Use this version for testing, getting feedback. Does not allow submitting data.'

Fill form online/offline

- ❶ Select a project
 - Under “Learn more”, select “Online-only (multiple submissions)” or “Online-offline (multiple submissions)”
 - Clic “Open”
 - Enter the data in the form
 - Clic “Submit” → The data will be added to the database



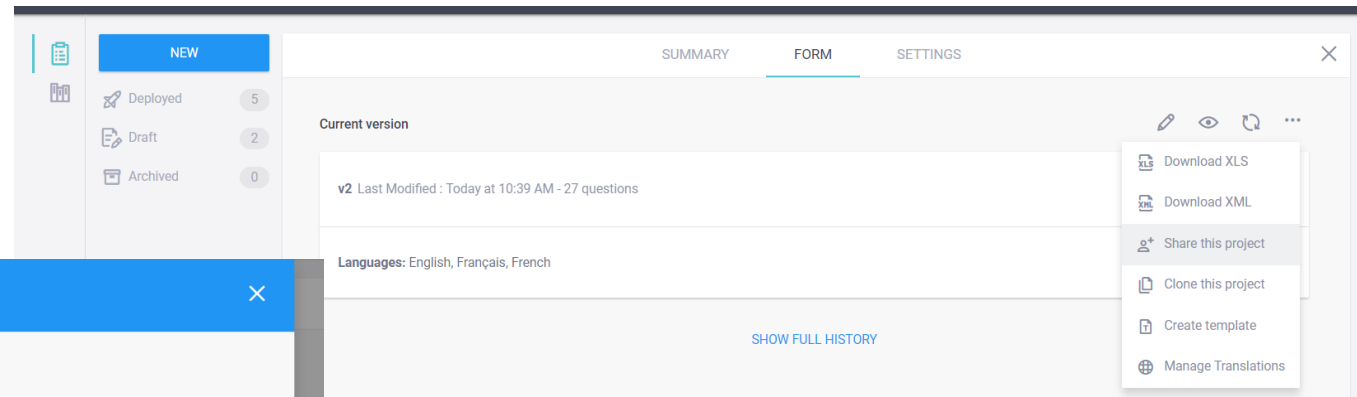
The screenshot shows a web interface for configuring a data collection form. The interface is divided into three tabs: SUMMARY, FORM (selected), and SETTINGS. On the left, there is a sidebar with a 'NEW' button and a 'loading...' indicator. The main content area is titled 'Current version' and displays the following information:

- Current version: v2 Last Modified : Today at 10:39 AM - 27 questions
- REDEPLOY button
- Languages: English, Français, French
- SHOW FULL HISTORY button

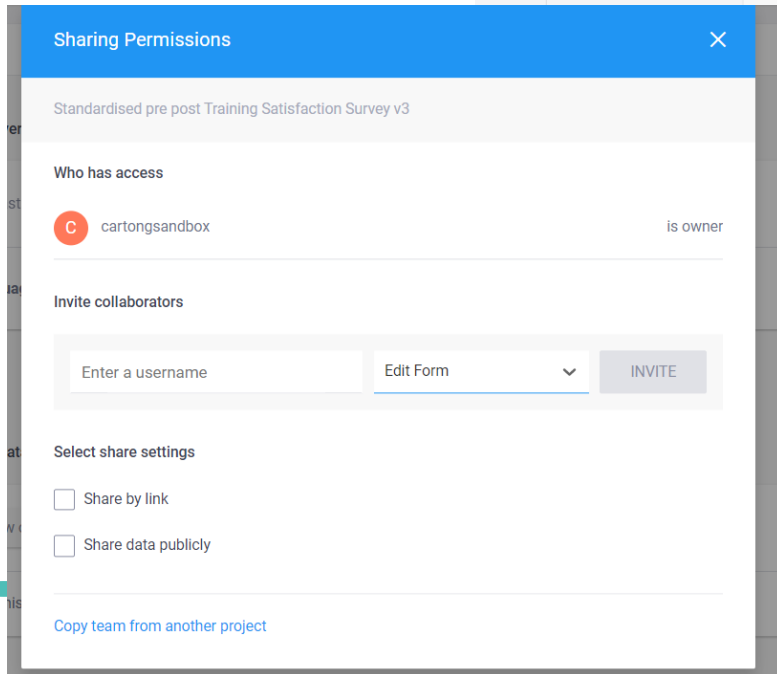
Below this, there is a 'Collect data' section with a dropdown menu set to 'Online-Offline (multiple submission)'. To the right of the dropdown are 'COPY' and 'OPEN' buttons. At the bottom, a text box explains: 'This allows online and offline submissions and is the best option for collecting data in the field.'

Data sharing– Kobo Toolbox settings

- Share with another Kobo user (view or edit form)



The screenshot shows the 'SETTINGS' tab of a Kobo Toolbox project. The left sidebar has a 'NEW' button and a list of project states: 'Deployed' (5), 'Draft' (2), and 'Archived' (0). The main content area shows 'Current version' information: 'v2 Last Modified: Today at 10:39 AM - 27 questions' and 'Languages: English, Français, French'. A 'SHOW FULL HISTORY' link is visible. A dropdown menu is open on the right, showing options: 'Download XLS', 'Download XML', 'Share this project', 'Clone this project', 'Create template', and 'Manage Translations'.



The 'Sharing Permissions' dialog box is open, showing settings for the project 'Standardised pre post Training Satisfaction Survey v3'. It includes a section 'Who has access' with a user 'cartongsandbox' listed as the owner. Below is an 'Invite collaborators' section with a text input field 'Enter a username', a dropdown menu set to 'Edit Form', and an 'INVITE' button. At the bottom, there are two unchecked checkboxes: 'Share by link' and 'Share data publicly'. A link 'Copy team from another project' is also present.

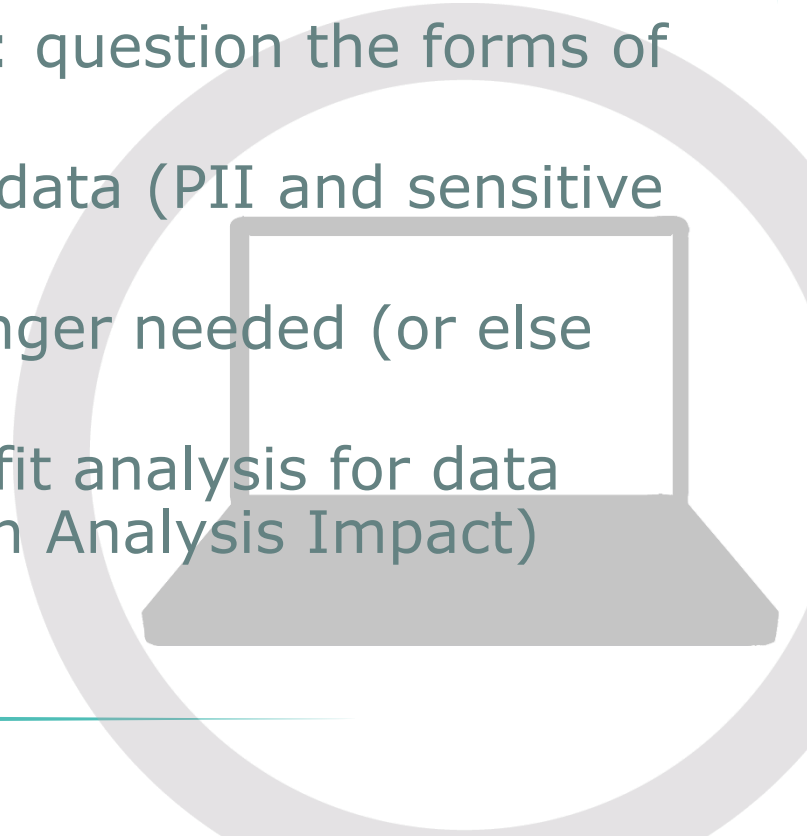
Terre des hommes account recommendation

- Two scenarios:
 - Having a central “mother” account at Delegation level with access limited to a few people (M&E, DB manager and program coordinator)
 - Having “child” accounts for each PM or each base for example who can then view the data that concerns them

| | Centralised and child accounts | Only a centralised account |
|--------------------|--|--|
| Size of delegation | If size of the delegation (with many roles & responsibilities) requires having more than one account | Small delegation with few people using Kobo |
| Security of data | Better data protection, with fewer people | NB: be careful, risk on all the forms if everyone has the login! |

Data at risk ?

- 🕒 Personally identifiable information (PII) data = Directly identifiable data
- 🕒 Sensitive data: Violence-related, disease-related...
- 🕒 Context-dependent (no “hard” classification), will depend
- 🕒 The golden rules:
 - Only collect what is necessary: question the forms of the PM on this
 - never collect the two types of data (PII and sensitive data) in the same database!
 - Destroy any data that is no longer needed (or else anonymise is!)
- 🕒 You will need to do a risk / benefit analysis for data collection (DPAA: Data Protection Analysis Impact)
- 🕒 See ICRC 2017 toolkit.



Principles at stake

- Beneficiary's consent
- "do no harm !" policy
- Confidentiality and security
- legal aspect:
 - need to be in line with national data protection law
 - Need to be in line with international law (ie see new EU law)
- Data protection is at the crossroad between legal obligations, ethical duties and operational ambitions

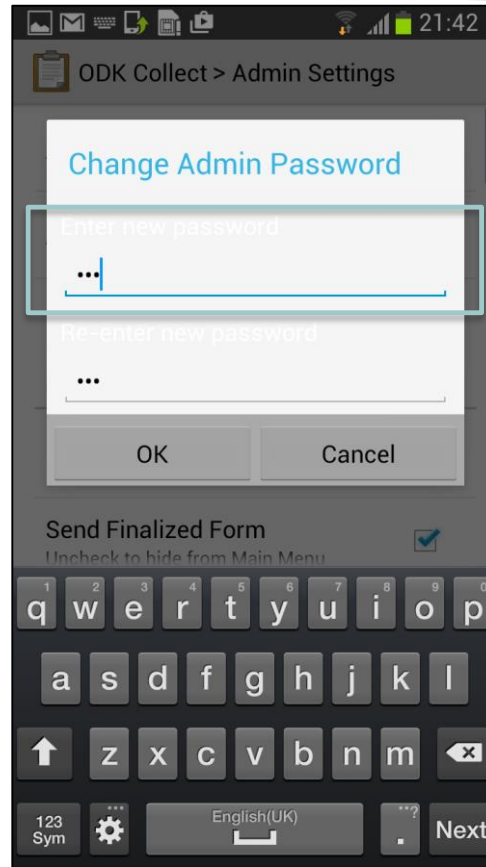
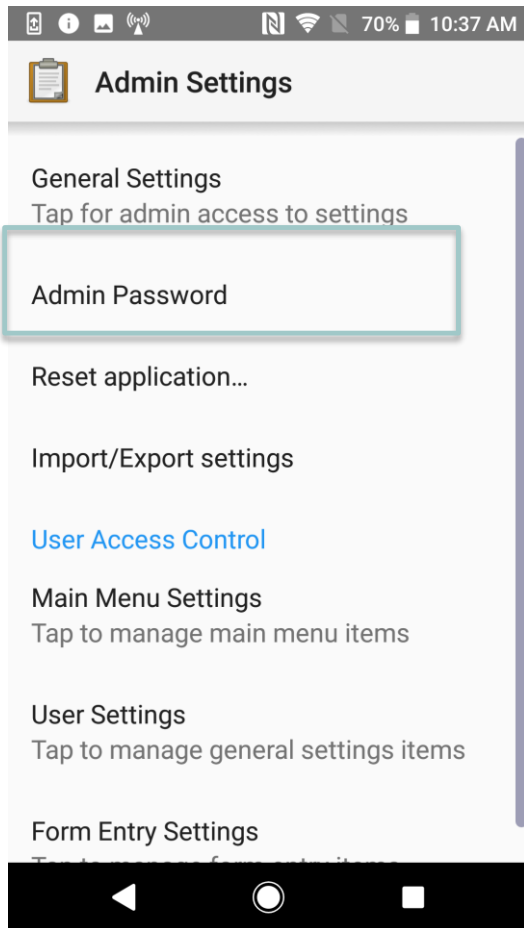
obligation of means
- or else Tdh will be
deemed
responsible of any
misuse of data

Level of Security

- ❗ « *There are only two types of companies: those that have been hacked and those that will be* »,
Robert Mueller, FBI Director



Security – Phone Admin settings



Make password invisible in General Settings

Set a password to access the admin setting

 You can also hide the Kobo username

Security – Kobo Toolbox settings

The image shows a composite screenshot. On the left is the Kobo Toolbox web interface for the user 'cartongsandbox'. The 'Privacy' section has a checkbox 'Require authentication to see forms and submit data' which is checked. A blue arrow points from this checkbox to a dialog box on the right. The dialog box is titled 'Server Requires Authentication' and contains the text: 'Please enter username and password for server: https://kc.msf.org/gisflying3/formList'. Below the text are input fields for 'Username' and 'Password', and 'Cancel' and 'OK' buttons at the bottom. At the bottom of the entire image, there is a caption: 'Need to set the password to the general settings of the ODK Collect app'.

NEW

Deployed 5

Draft 2

Archived 0

cartongsandbox

Privacy

Require authentication to see forms and submit data

Name

Use this to display your real name to other users

Email

MODIFY PASSWORD

Organization

SAVE CHANGES

ODK Collect > Get Blank Form

Server Requires Authentication

Please enter username and password for server:
https://kc.msf.org/gisflying3/formList

Username

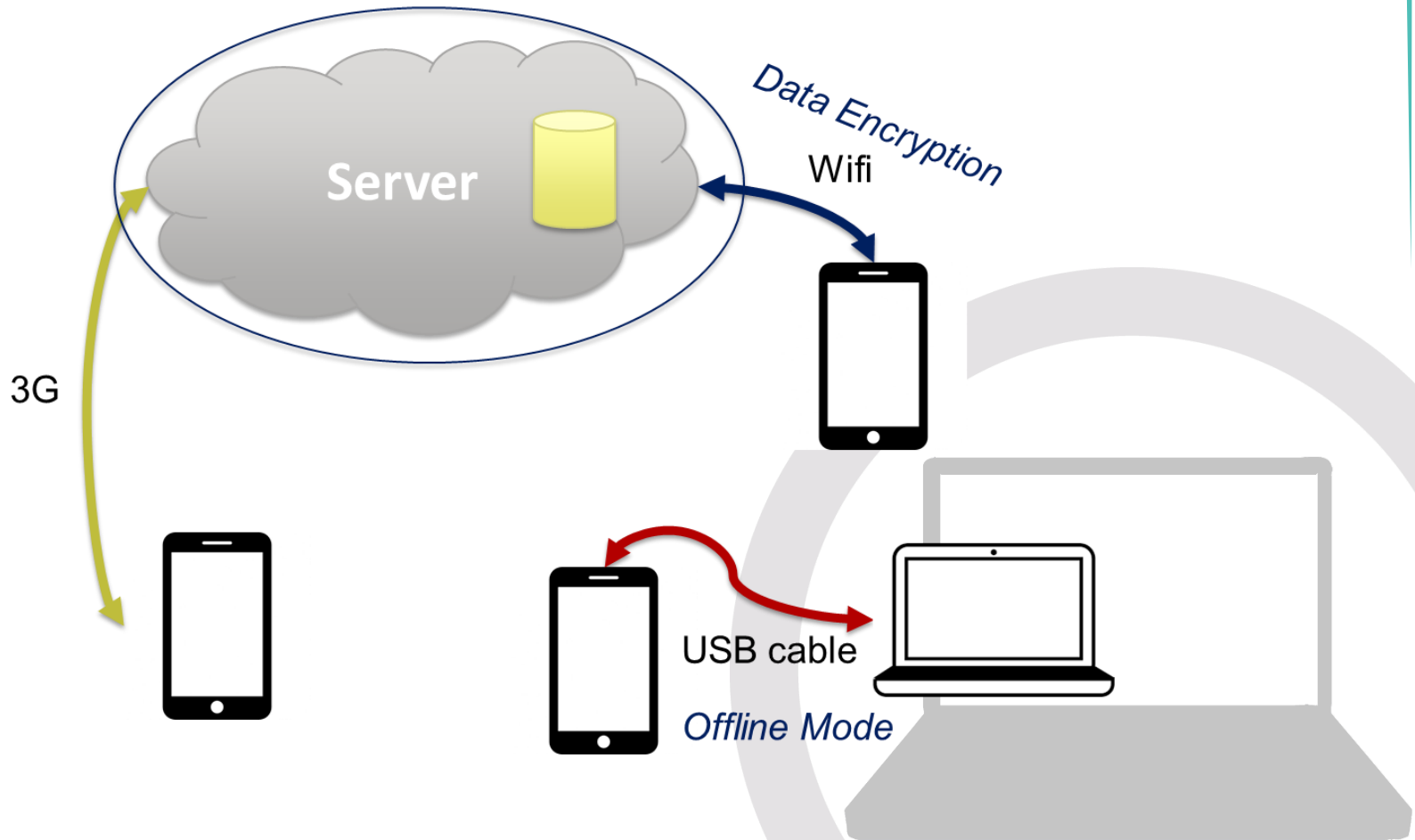
Password

Cancel OK

Toggle All Refresh Get Selected

Need to set the password to the general settings of the ODK Collect app

Level of Security

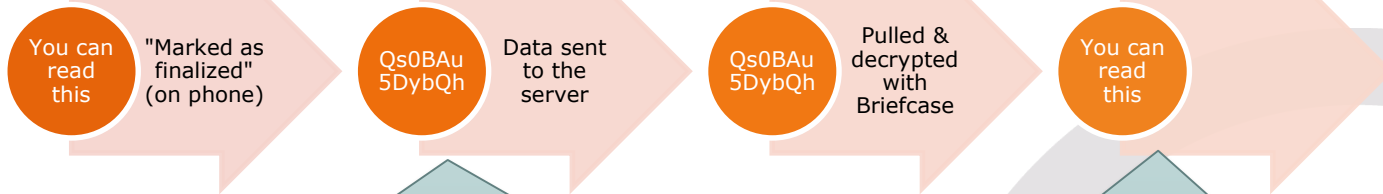


Data Encryption with Kobo/ODK Briefcase

How Encryption works:

The data is available on the mobiles until the form is "Marked as Finalized".

The data is submitted (still encrypted) to the server (at this point the data is still not readable)



Once a form is marked as finalized, ODK Collect encrypts the form/survey. It is from that moment not possible to access the data on the mobile anymore.

The data must be pulled through ODK Briefcase and is decrypted using a private key (locally on laptop/desktop). The data then becomes readable again

Procedure detailed here:

<http://support.kobotoolbox.org/en/articles/592415-encrypting-forms>- not for the faint-hearted!

Zoom on ODK Briefcase

- ❶ Two main possible uses linked to Kobo Toolbox:
 - To push data to Kobo if you want to take the data by USB cable rather than wifi/3G
 - To export and decrypt encrypted data
- ❷ 3 main tabs:
 - Pull: takes the data from the server
 - Export : outputs the encrypted data in CSV/Excel format
 - Push: allows to take the data from the phones through USB and push them to Kobo

Zoom on ODK Briefcase

Kobo Toolbox



Get blank forms

Send filled surveys

ODK Collect



ODK Briefcase
(Export encrypted data)

ODK Briefcase
(transfer USB)

Different components to data security...

| Transmission mode | Comments |
|-------------------|--|
| Wifi | <ul style="list-style-type: none">- Public / Private- Encrypted / Not Encrypted |
| 3G | <ul style="list-style-type: none">- Relies on provider policy |
| Offline Mode | |

Data Encryption

on the phone

on the server

| Physical Location of your server | Comments |
|----------------------------------|------------------------|
| Host in USA | HIPAA / FISMA Laws |
| Host in Europe | EU data Protection Law |
| Host on your premises | Your Policy |
| On you Local Computer | |