

How to setting TOTP(One-time password) (From off-campus · Google Authenticator)

TUT Information media center

Our university has introduced two-factor authentication (TOTP authentication) using one-time passwords which based on time to ensure identity and prevent unauthorized using of important systems. This authentication requires one-time passwords in addition to the username and password which user remembered to achieve strong authentication. A one-time password can be generated only on the smartphone which user owns.

Therefore, it is necessary to install an application for using TOTP authentication on your smartphone in advance and register it with University's user authentication system. This section describes the procedure for registering the one-time password application 'Google Authenticator' in the authentication infrastructure system.

This document describes the procedure for setting from off-campus network. Please see <https://imc.tut.ac.jp/totp> for the procedure of setting from on-campus network.

The authentication method is switched depending on the type of access source network (on-campus or off-campus). For example, on-campus networks can be authenticated only with a username and password, but off-campus networks require TOTP authentication in addition to that. In this classification, the following networks are classified as "off-campus".

- Connection from off-campus by VPN
- Wired guest network (Village Tenpaku etc.)
- Wireless network SSID: eduroam
- Wireless network SSID: tutguest

What to prepare

- Account Information Notification (This procedure requires your own username and password)
- Matrix code (From the document "Notification of Your Matrix Code")
- Environment which you can receive the password recovery email address

Please refer to <https://imc.tut.ac.jp/passwordreset> if you have not acquired the authentication matrix code or have not registered the password recovery email address.

Procedure of registering the one-time password App

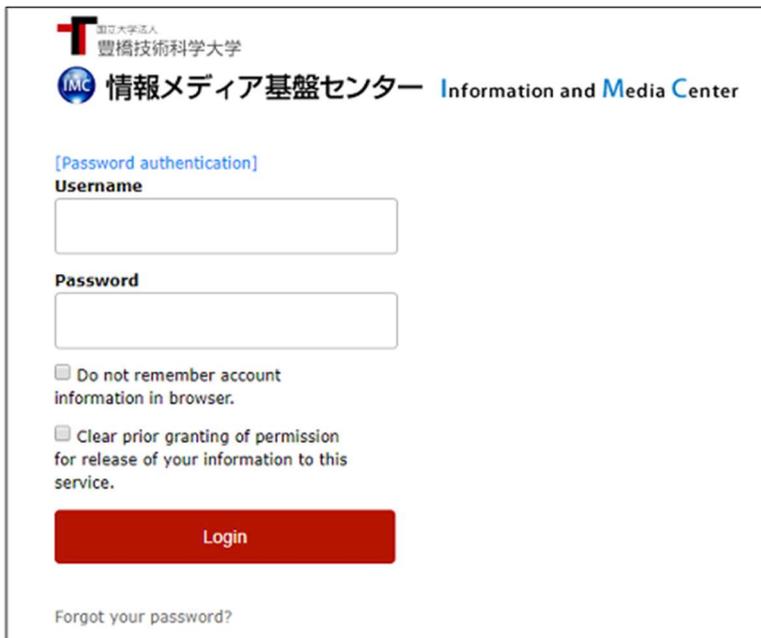
1. Connect your PC and smartphone for the setting to the network.
2. Check the date and time on your PC and smartphone are correct.
3. Install Google Authenticator on your smartphone.

Google Authenticator

iOS: <https://apps.apple.com/jp/app/google-authenticator/id388497605>

Android: <https://play.google.com/store/apps/details?id=com.google.android.apps.authenticator2>

4. Display "User Profile Maintenance" page in the PC browser.
To display the "User Profile Maintenance" page, click "Change password" in quick menu on the home page of the Information Media Center (<https://imc.tut.ac.jp/>).
5. On the "Password Authentication" screen, entry username and password listed on "Account Information Notification".



The screenshot shows the login page for the Information and Media Center. At the top left is the logo of the University of Tsukuba (豊橋技術科学大学). Below it is the logo for the Information and Media Center (情報メディア基盤センター). The page title is "[Password authentication]". There are two input fields: "Username" and "Password". Below the password field are two checkboxes: "Do not remember account information in browser." and "Clear prior granting of permission for release of your information to this service." A red "Login" button is at the bottom. A link "Forgot your password?" is at the bottom left.

6. Click “Register the one-time password generator” on the User Profile Maintenance page.

ようこそ
さん

パスワード変更
Change Password

プロフィールメンテナンス
Profile Maintenance

印刷枚数の確認
Show print accounting information

教育用システムディスク
利用状況
Disk usage on Educational System

ワンタイムパスワードアプリを登録する
Register the one time password generator

認証用マトリクスコードの表示
Show your authentication matrix code

パスワード変更 Change Password

氏名 - Name

現在のパスワード - Old Password

新しいパスワード - New Password

新しいパスワード (確認) - Confirm New Password

◆パスワードは型座に反映されます◆
◆Your password change is reflected immediately◆

◆パスワードは次の基準を満たして下さい◆
◆Your password must meet the following requirements◆

- ・12文字以上であること。
It must be longer than twelve letters.
- ・英数字もしくは以下の記号からなること (全角文字・空白は使用不可)。
It must be composed of alphabet letters, numbers, and the following symbols.
!"#\$%&'()*+,-./:;<=>?@^_`{|}~
- ・大文字小文字数字記号のうち3種類を含めること。
It must include at least three types of characters among uppercase, lowercase, numbers and symbols.
- ・新しいパスワードは旧パスワードと異なること。
It must be different from the old password.
- ・他人に推測されやすいパスワードではないこと。
(ユーザIDや英字氏名と同じ文字列は設定不可)
It must not be easily guessed by others.
(it cannot contain your username, surname, and given name)

保存

7. “Matrix authentication” screen will be displayed. Entry the value which corresponding to the coordinates on PC browser by referring to the authentication matrix code.

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[Matrix authentication]
Enter your response.

F5 F3 D4 F1 C5 D1 E3 E5

Login

For example, if the value in row F and column 5 of "Notification of Your Matrix Code" is "12" and the value in row F and column 3 is 55, enter 1255... and so on. Repeat this for the number of coordinates shown.

	1	2	3	4	5	6
A	15	81	40	73	13	83
B	48	43	06	27	44	56
C	10	24	25	85	45	99
D	05	42	04	62	02	91
E	94	58	64	97	88	09
F	90	37	55	11	12	20

Sample

8. Select 「Agree」

The information above would be shared with the service if you proceed. Do you agree to release this information to the service every time you access it?

Select an information release consent duration:

- Ask me again at next login
 - I agree to send my information this time.
- Ask me again if information to be provided to this service changes
 - I agree that the same information will be sent automatically to this service in the future.
- Do not ask me again
 - I agree that **all** of my information will be released to **any** service.

This setting can be revoked at any time with the checkbox on the login page.

9. The QR code will be displayed on PC browser. Start Google Authenticator on the smartphone and scan the QR code.

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To register your one-time password (OTP) generator to the university authentication system, follow the steps below.

- Install a OTP generator such as Google Authenticator or Microsoft Authenticator to your smartphone.

iPhone/iPad Android

[Google Authenticator](#) [Google Authenticator](#)
[Microsoft Authenticator](#) [Microsoft Authenticator](#)
- Scan the QR code below with your OTP generator. If your OTP generator does not read the QR code correctly, manually enter the registration key KAKVDZBBJWZT6GPL into your OTP generator.



キー : KAKVDZBBJWZT6GPL
- Enter the 6-digit one-time password generated by your OTP generator and press the "Register" button.

※There is some possibility of being displayed "Registered" sign, even if you have not registered the one-time password application. In that case, click the "Reissue" button.

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Your one-time password (OTP) generator has already been registered to the university authentication system. Do you need to overwrite its registration?
 If you need to overwrite its registration, click the "Re-register" button.
 If you do not need to do so, click the "Logout" button.

Follow the steps below on the Google Authenticator app.

①Tap 「設定を開始」 (start setting)



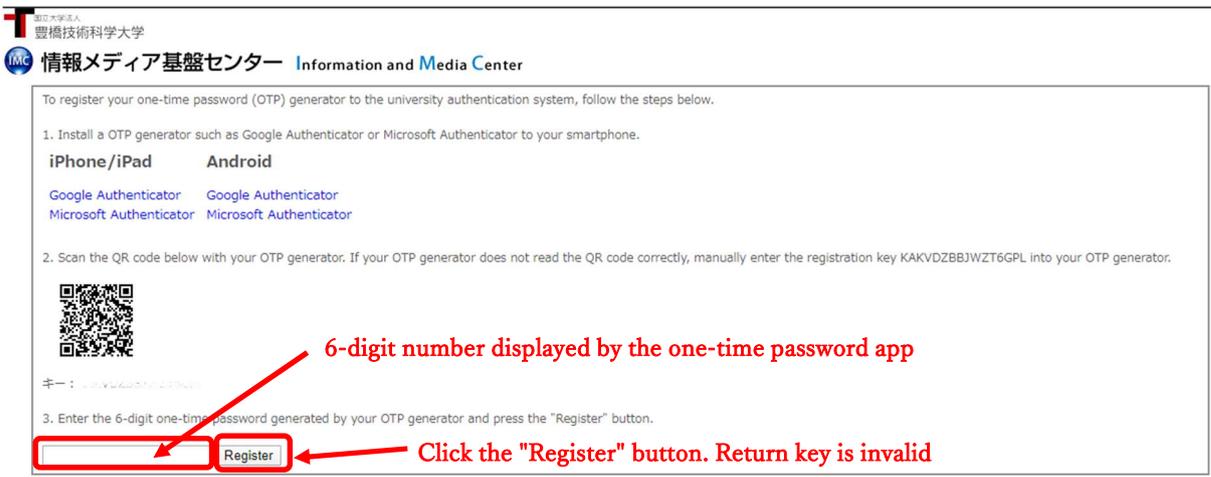
②Tap 「バーコードをスキャン」 (Scan the barcode)



③The 「バーコードをスキャン」 (Scan the bar code) screen will appear. Scan the QR code displayed on the browser.



10. If you're successful with the scan, a 6-digit number will be displayed. Enter the number in the entry field of the PC browser and click the "Register" button.



11. Registration is completed when the PC browser displays "Processing completed successfully". Click the "OK" button.

12. After the registration, access the multi-factor authentication test page (<https://example.imc.tut.ac.jp/mfa-test/>) with PC browser and check the registered one-time password application works properly. If authentication is successful, the screen shown on the right is displayed.

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多要素認証のテストページ

このページを閲覧するためには、ワンタイムパスワードまたは職員証によって認証する必要があります。現在このメッセージを表示できているあなたは、正常に多要素認証の設定ができています。

Multi-Factor Authentication Test

This page requires the multi-factor authentication (MFA) using your one-time password app or your ID card. You have successfully configured the MFA since you can view this message.

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