



# Simple Encryption

By Hippo Games

## ABOUT

---

**Simple Encryption** is a cross-platform data encryption plugin. You can simply encrypt and decrypt data with one line of code, compute hashes and create digital signatures.

## FEATURES

---

- Calculate MD5 hash
- Encrypt data with strong encryption (AES)
- Encrypt data with fast but weak encryption (B64R, B64X)
- Protect PlayerPrefs
- Sign data with asymmetric encryption (digital signature)

## HOW TO USE

---

- [Md5.ComputeHash\(text\)](#)
- [Base64.Encode\(bytes\)](#), [Base64.Encode\(text\)](#)
- [B64R.Encode\(text\)](#)
- [B64X.Encrypt\(text, "password"\)](#)
- [AES.Encrypt\(text, "password"\)](#)
- [RSA.GenerateKeys](#), [RSA.SignData](#), [RSA.CheckSignature](#), [RSA.EncryptText](#), [RSA.DecryptText](#)
- [PlayerPrefsEncrypted](#) can be used the same way as [PlayerPrefs](#)

## TIPS

---

- Use [PlayerPrefsEncrypted](#) instead of [PlayerPrefs](#) (B64X will be used, fast but weak)
- Encrypt saved games and other important data with [AES](#) (can be slow for large data)
- You can use [SystemInfo.deviceUniqueIdentifier](#) as an encryption key
- Encrypt data stored in RAM with [B64R/B64X](#)

- You can use [Base64](#) to convert images to text
- Create digital signatures with [RSA](#) when sending data between client and server

## NOTE

---

Any protection can be hacked. You can only make it more difficult for the hacker.

## SETUP & TEST GUIDE

---

1. Create a new empty project
2. Download and import the package
3. Open demo scene
4. Run in Play mode

## HOW TO MODIFY AND EXPAND

---

You can modify package scripts at your own risk. Use any text editor.

## SCRIPT REFERENCE

---

Please refer to [ScriptReference.chm](#) for more detailed information.

<a href="#">AES.cs</a>	Advanced Encryption Standard
<a href="#">B64R.cs</a>	Custom fast encryption (weak)
<a href="#">B64X.cs</a>	Custom fast encryption (weak)
<a href="#">Base64.cs</a>	Binary-to-text encoding
<a href="#">Md5.cs</a>	MD5 algorithm
<a href="#">PlayerPrefsEncrypted</a>	Protected PlayerPrefs alternative
<a href="#">RSA</a>	Digital signatures

## REFERENCES

---

- MD5 - <https://en.wikipedia.org/wiki/MD5>
- Base64 - <https://en.wikipedia.org/wiki/Base64>
- AES - [https://en.wikipedia.org/wiki/Advanced Encryption Standard](https://en.wikipedia.org/wiki/Advanced_Encryption_Standard)

## FEEDBACK

---

Please ask all your questions on the asset page. You can also **RATE** ★★★★★ my asset and request new features. I'll be glad to answer you!