

Digital Signatures using PDF Creator

G. Swetha
Assistant Professor
CVRCE

Abstract— Digital signatures are useful to show that, the document is approved electronically. It is the proof for the sender’s identity. This paper is about creating digital signatures using PDFCreator. PDFCreator is a tool which converts our documents into PDF format. It creates a virtual printer that prints to PDF files, and allows practically any application to create PDF files by choosing to print from within the application and then printing to the PDFCreator printer. Some other tools for creating digital signatures on PDF documents are iTextSharp, Nova pdf Expert, etc.

Index Terms:Digital signature,PDFCreator,Public key,Private key.

INTRODUCTION

Digital signatures are useful for security of the documents and to save money [1][2][3]. Because we can save transportation expenditure for getting signature from a person. First we need to get certificates which are with pfx file extension.pfx file contains certificate owner’s information and also public and private keys[4][5][6]. These certificates are used as sender’s identity for the pdf files. PDFcreator creates virtual printer that prints to PDF files, and allows any kind of application to create PDF files by printing from within the application and then printing to the PDFCreator printer. We can download PDF Creator from Internet freely. After downloading we need to install PDF Creator in our computer. It will create shortcut in menu and also it will create virtual PDF Creator Printer in Printers List.

RESULTS AND ANALYSIS:

When we open PDFCreator, it will show us the following window.

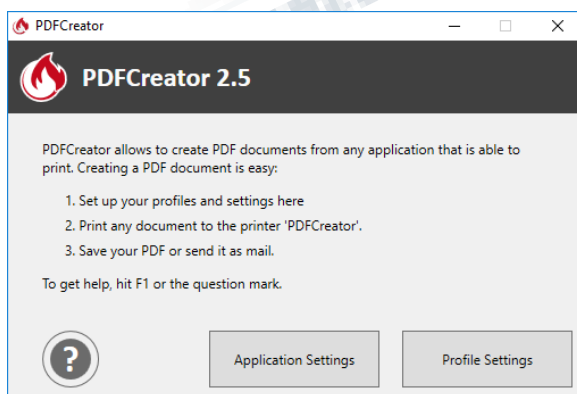


Fig 1: PDFCreator window when we click on it in start menu.

Profile Settings: We can create New Profile using PDF creator Profile Settings.

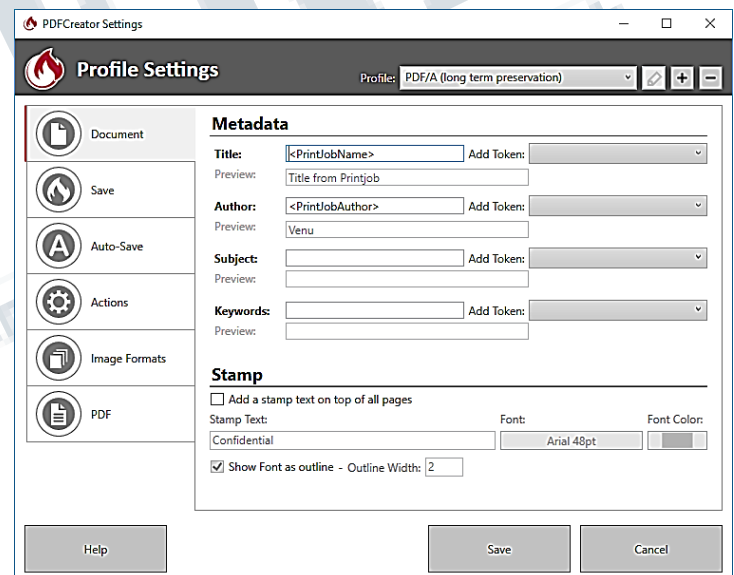


Fig 2: PDFCreator Profile Settings.

We have tabs like Documents, PDF, and Image Formats etc to configure our required profile.

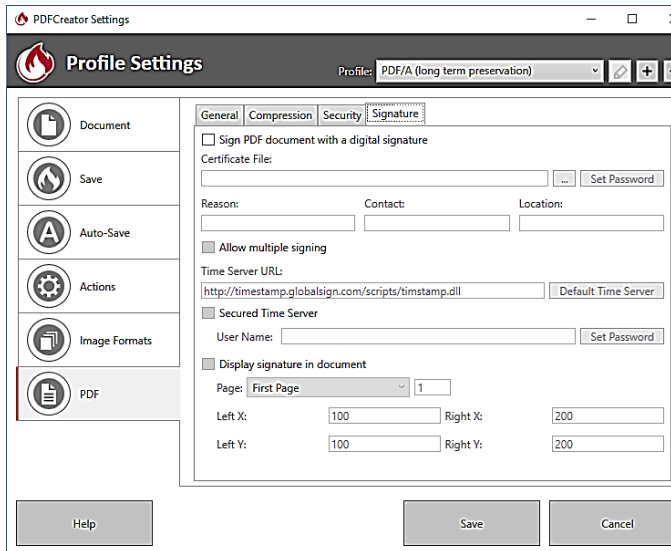


Fig 3: Signature tab in profile settings.

After selecting PDF Vertical tab and Signature tab, we will have option to select our Digital Signature. There we need to check Sign PDF document with a digital signature checkbox. Next, we can select our Certificate file by clicking browse button underneath checkbox.

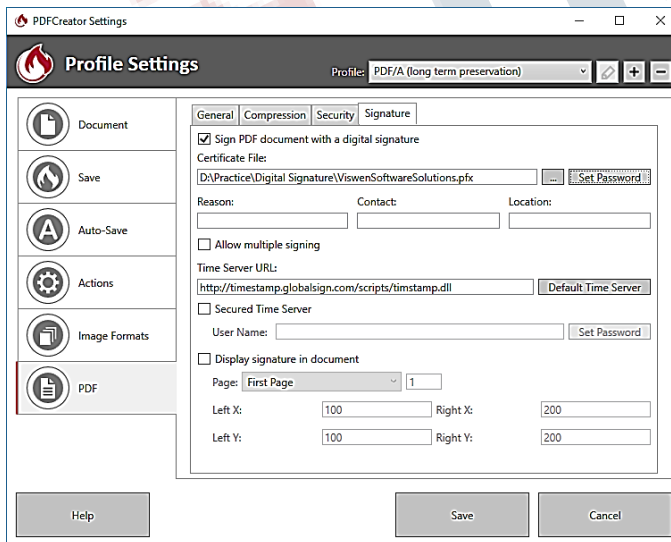


Fig 4: Selecting Signature certificate.

We can also set Signature Password by clicking Set Password button.

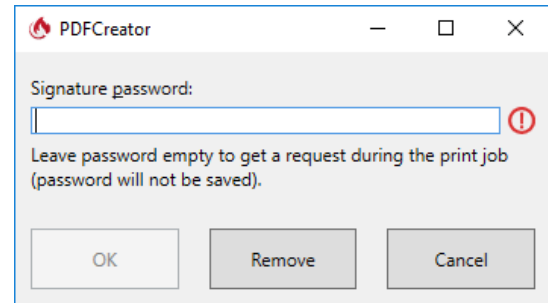


Fig 5: Setting password for Digital Signature.

Then we need to click save button to create profile with chosen settings.

Application Settings: In Application setting we can select our created profile as default profile.

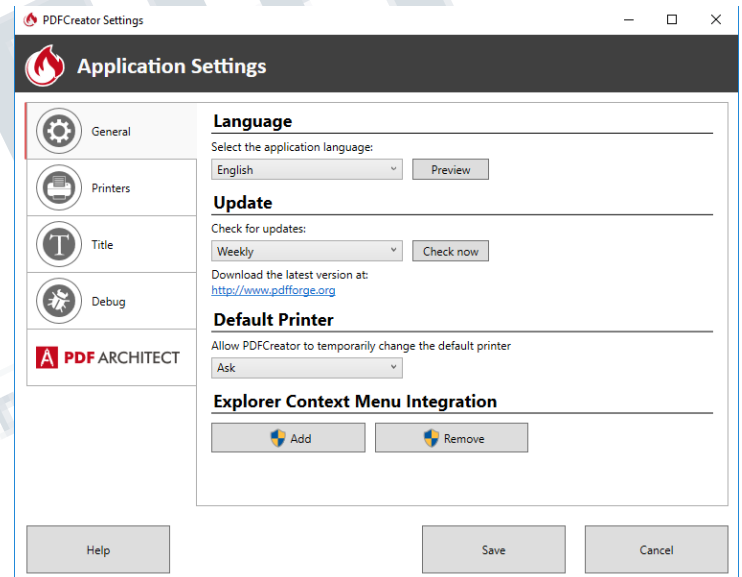


Fig 6: Application Settings.

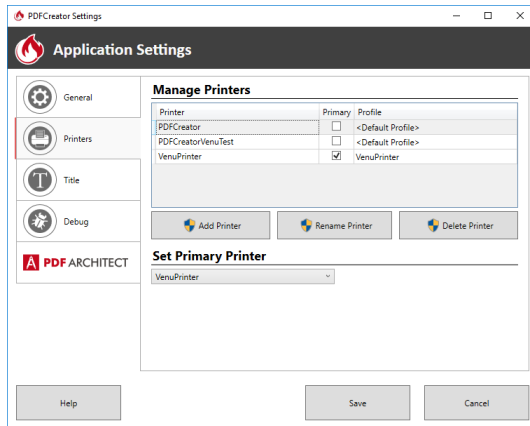


Fig 7: Printer tab in application settings.

We can add/delete/rename virtual Printers and select Profiles which we can create using PDF Creator. When we open Printers, we can see PDF Creator Virtual Printer just like other laser printers. When we see PDF printer properties we can see List of Profiles which are available. We need to select profile which we have set our digital signature. When we print document using selected profile it will print Digital Signature. We can add printer with add Printer Button in Application Setting of PDF Creator.

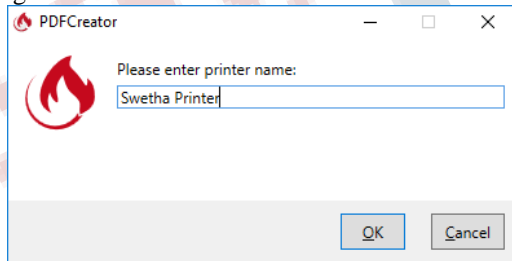


Fig 8: Creating new virtual printer.

After creating Virtual Printer, we must select Profile which we have created with Digital Signature. We can convert any kind of document into PDF with Digital Signature. When we want to print a text file with Digital Signature, we select Print option then select PDF printer which we have created using PDF Creator.

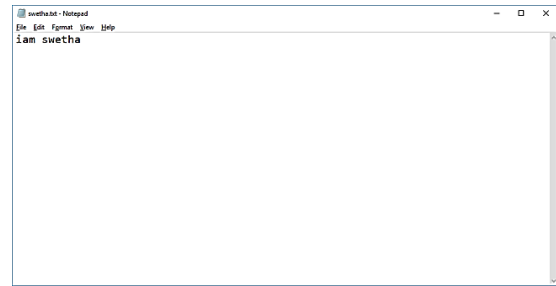


Fig 9: Input Text file which needs digital signature

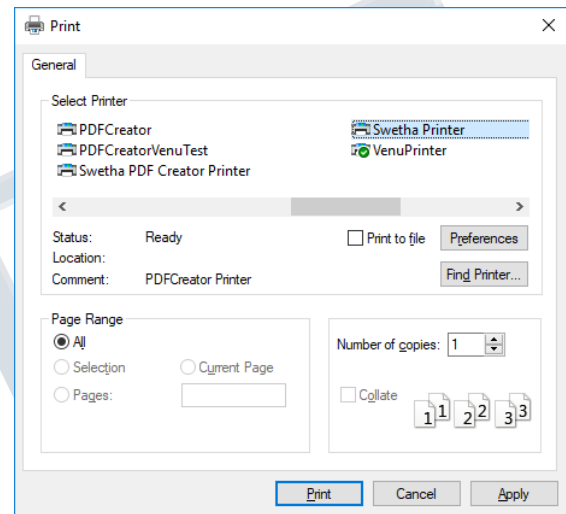


Fig 10: Selecting PDF Printer which prints digital Signature.

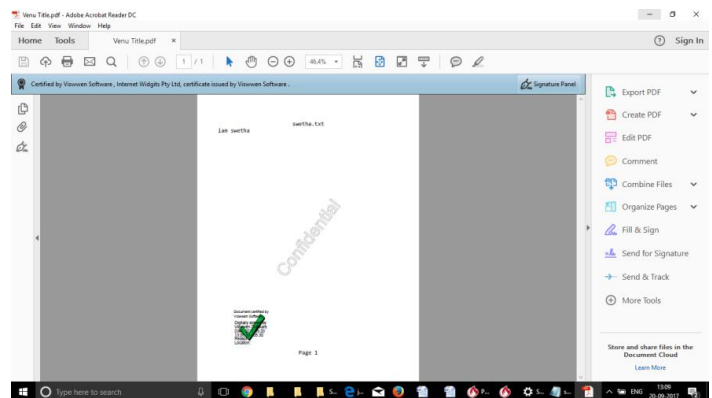


Fig 11: Output file with digital signature.

CONCLUSION:

Digital signatures are useful for providing sender's identity electronically and provide security to our documents. By using PDFCreator tool, we can create different types of profiles based on our requirements. Here we have created profile to print digital signature and we have selected virtual pdf printer which uses digital signature profile.

REFERENCES

1. An Introduction to Digital Signature Schemes Mehran Alidoost Nia, Ali Sajedi, Aryo Jamshidpey.
2. A New Variant of RSA Digital Signature Ashish Vijay, Priyanka Trikha, Kapil Madhur .
3. An Efficient Implementation of Digital Signature Chiranjib Dutta, Swati Sarkar, Animesh Kar.
- 4.A Survey on Digital Signature Shraddha Kalbhor , Anita Gaikwad, Kajal Bhise , Prof. Dipmala Salunke , Varsha Bangar.
5. Survey on Techniques Developed using Digital Signature: Public key Cryptography Tshivenda Singh, Md. Sarfaraz Iqbal, Noida, India Arunima Jaiswal.
6. A survey on digital signatures Venkateswara Rao Pallipamu, Thammi Reddy K, Suresh Varma P.