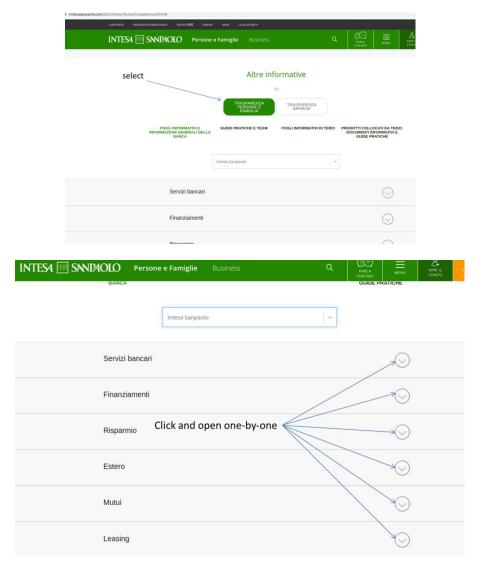
DESCRIPTION

Check the existence of a file at a known url address download the file and search for differences between two subsequent files. If differences exist output a report of the differences. The process is divided in two phases:

URL 1 : company name INTESA

PHASE 1 - CHECK & DOWNLOAD

url: https://www.intesasanpaolo.com/it/common/footer/trasparenza.html#



Open every main product list (Servizi bancari, Finanziamenti,) one-by-one.

Then for every product list create a file with the list of all the name of single product in the main product list.

I.e. (see screenshot below). Create a list every time the script works:

Servizi Bancari;BANCOMAT Pay ® - FI-1331

Servizi Bancari; Bonifici - FI-1068

Servizi Bancari; Carta di credito - Carta Smart Control - FI-1510

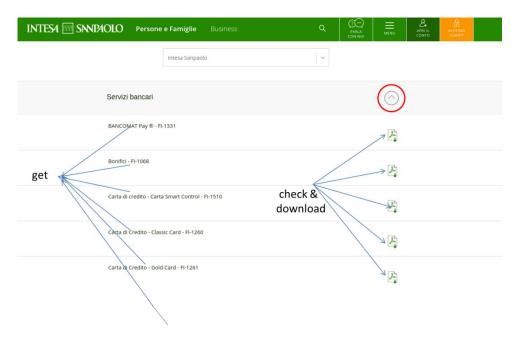
Servizi Bancari;Carta di Credito - Classic Card - FI-1260

Servizi Bancari;Carta di Credito - Gold Card - FI-1261

Servizi Bancari;......

Save the list as (i.e.):

YYYYMMDD-INTESA-PERSONE-ServiziBancari.txt



For each line of the main product list (i.e. BANCOMAT Pay – FI 1331):

- A) First option . When the script run the main list is created :
 - 1) Check if the product exists in the main list compared with the previous available one
 - 2) If exists get the products name (i.e. BANCOMAT Pay FI 1331) one-by-one and download the file in the proper folder (folder tree for download INTESA/PERSONE/SERVIZI_BANCARI) and with the proper filename. Filename must be:
 - YYYYMMDD-CompanyName-Segment-ProductName.OriginalFileExtension (usually pdf)
 - i.e.: 20201130-INTESA-PERSONE-BANCOMATPay-FI-1331.pdf
- B) Second option. When the script run the main list is created:
 - 1) If the file doesn't t exist <u>but was existing</u> in the previous main list write out NAA (not available anymore) => see OUTPUT phase below
 - 2) If the file doesn't t exist <u>and was not existing</u> in the previous list write out NEW (new document available) => see OUTPUT phase below

- a) If the file has been downloaded (that s to say exist) check if any difference exists compared with the previous version downloaded.
- b) If the file is NEW no difference must be performed
- c) If the file is NAA no difference must be performed

The output according with the previous eventualities is an excel file.

If [case a) above] the file is changed:

- 1. If nothing is changed output code is "no-change"
- 2. If something is changed output code is "changed" and a text file is created with all the text is changed. The txt filename is:

YYYYMMDD-CompanyName-Segment-ProductName-DIFF.txt

i.e.:

20201130-INTESA-PERSONE-BANCOMATPay-FI-1331-DIFF.txt

Each part of the changed content must be divided by a line or however it must be identifiable

If [case b) above] the file is NEW: the output code is NEW

If [case c) above] the file is NAA: the output code is NAA

i.e. :

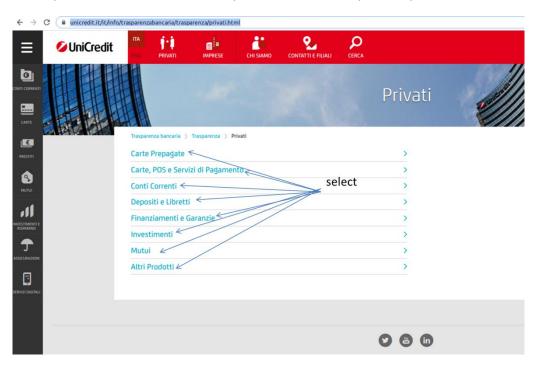
COMPANY	DATE	SEGMENT	MAIN PRODUCT	PRODUCT	CODE
INTESA	20201130 F	PERSONA	Servizi Bancari	BANCOMAT Pay ® - FI-1331	no-change
INTESA	20201130 F	PERSONA	Servizi Bancari	Bonifici - FI-1068	no-change
INTESA	20201130 F	PERSONA	Servizi Bancari	Carta di credito - Carta Smart Control - FI-1510	changed
INTESA	20201130 F	PERSONA	Servizi Bancari	Carta di Credito - Classic Card - FI-1260	NAA
INTESA	20201130 F	PERSONA	Servizi Bancari	Carta di Credito - Gold Card - FI-1261	NEW
INTESA	20201130 F	PERSONA	Servizi Bancari		

If difference occur the output of the difference could be:

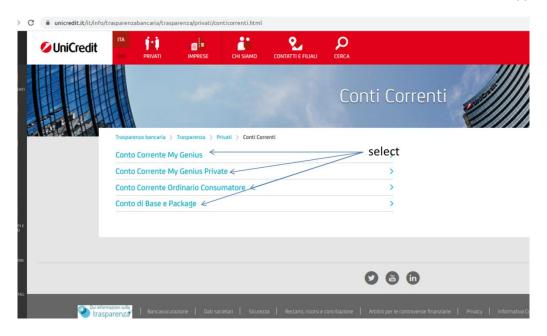
URL 2: company name UNICREDIT

PHASE 1 - CHECK & DOWNLOAD

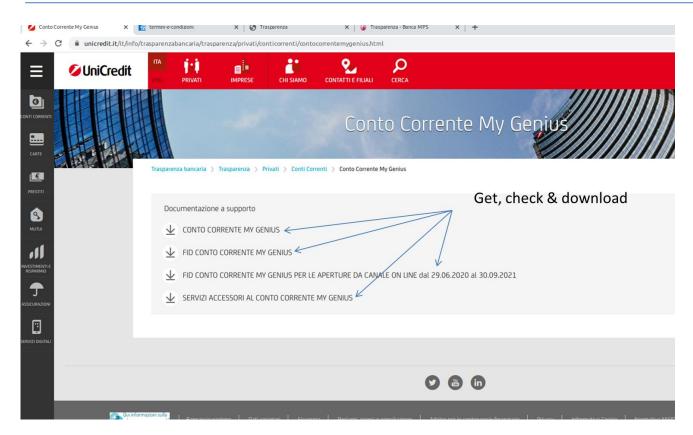
url: https://www.unicredit.it/it/info/trasparenzabancaria/trasparenza/privati.html



First level of selection. All the line in list must be selected. In the above screenshot suppose to select "Conti Correnti"



A second level of selection is possible



If a second level selection exists open every main product list (Conti Correnti,,) one-by-one and the secondary product list (Conto Corrente MyGenius, Conto Corrente MyGenius Privato,).

Then for every main/secondary product list create a file with the list of all the name of single product in the main product list.

I.e. (see screenshot above). Create a list every time the script works:

Main;Secondary;Product

Conto Corrente; Conto Corrente My Genius; CONTO CORRENTE MY GENIUS

Conto Corrente;Conto Corrente My Genius;FID CONTO CORRENTE MY GENIUS

Conto Corrente; Conto Corrente My Genius; FID CONTO CORRENTE MY GENIUS PER LE APERTURE DA CANALE ON LINE dal 29.06.2020 al 30.09.2021

Conto Corrente; Conto Corrente My Genius; SERVIZI ACCESSORI AL CONTO CORRENTE MY GENIUS

A single file with the full list of main (and secondary if existing) product must be provided.

Save the list as (i.e.):

YYYYMMDD-UNICREDIT-PRIVATI-Conti-Correnti.txt

If a secondary list doesn't exist the format of the file will be:

Main; Product

Finanziamenti e Garanzie; Prestito Chirografario Privati da 75.000,01 euro â?? TASSO FISSO â?

Finanziamenti e Garanzie; PRESTITO FINALIZZATO à?? Credit Express Quick à?

Finanziamenti e Garanzie;APERTURA DI CREDITO IN CONTO CORRENTE PER CONSUMATORE DI IMPORTO SUPERIORE A 75.000 EURO

Finanziamenti e Garanzie; CREDITI DI FIRMA (FIDEJUSSIONI) RILASCIATI DALLA BANCA E FIDEJUSSIONI IN ARRIVO A FAVORE NOSTRI CLIENTI

Finanziamenti e Garanzie; Credit Express Gold

Finanziamenti e Garanzie; GARANZIE RICEVUTE - PEGNO DI TITOLI E STRUMENTI FINANZIARI

For each line of the main product list (i.e. Conto Corrente MyGenius):

- C) First option . When the script run the main list is created :
 - 3) Check if the product exists in the main list compared with the previous available one
 - 4) If exists get the products name (i.e. Conto Corrente MyGenius) one-by-one and download the file in the proper folder (folder tree for download UNICREDIT/PRIVATI/CONTI_CORRENTI) and with the proper filename. Filename must be:
 - YYYYMMDD-CompanyName-Segment-ProductName.OriginalFileExtension (usually pdf)
 - i.e.: 20201130-UNICREDIT-PRIVATI- Conto Corrente MyGenius.pdf
- D) Second option. When the script run the main list is created:
- 5) If the file doesn't t exist <u>but was existing</u> in the previous main list write out NAA (not available anymore) => see OUTPUT phase below
- 6) If the file doesn't t exist <u>and was not existing</u> in the previous list write out NEW (new document available) => see OUTPUT phase below

- d) If the file has been downloaded (that s to say exist) check if any difference exists compared with the previous version downloaded.
- e) If the file is NEW no difference must be performed
- f) If the file is NAA no difference must be performed

The output according with the previous eventualities is an excel file.

If [case a) above] the file is changed:

- 3. If nothing is changed output code is "no-change"
- 4. If something is changed output code is "changed" and a text file is created with all the text is changed. The txt filename is:

YYYYMMDD-CompanyName-Segment-ProductName-DIFF.txt

i.e.:

20201130-UNICREDIT-PRIVATI- Conto Corrente MyGenius-DIFF.txt

Each part of the changed content must be divided by a line or however it must be identifiable

If [case b) above] the file is NEW: the output code is NEW

If [case c) above] the file is NAA: the output code is NAA

i.e.:

COMPANY	DATE	SEGMENT	MAIN PRODUCT	PRODUCT	CODE
UNICREDIT	20201130	PRIVATI	CONTI CORRENTI	CONTO CORRENTE MY GENIUS	no-change
UNICREDIT	20201130	PRIVATI	CONTI CORRENTI	FID CONTO CORRENTE MY GENIUS	NEW
UNICREDIT	20201130	PRIVATI	CONTI CORRENTI	FID CONTO CORRENTE MY GENIUS PER LE APERTURE DA CANALE ON LINE dal 29.06.2020 al 30.09.2021	changed
UNICREDIT	20201130	PRIVATI	CONTI CORRENTI	SERVIZI ACCESSORI AL CONTO CORRENTE MY GENIUS	NAA
UNICREDIT	20201130	PRIVATI	CONTI CORRENTI		

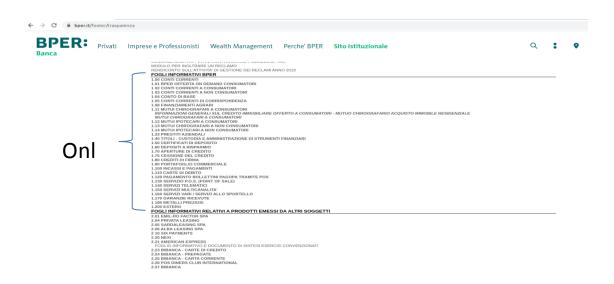
If a secondary list exists in the output there is only the main list (in the above example CONTI CORRENTI).

For the difference output see INTESA above.

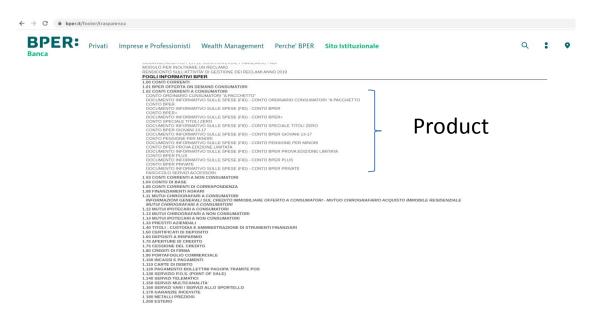
URL 3: company name BPER

PHASE 1 - CHECK & DOWNLOAD

url: https://www.bper.it/footer/trasparenza



First level of selection. All the line in list must be selected. In the above screenshot suppose to select "1 02 CONTI CORRENTI A CONSUMATORI"



Open every main product list (1 02 CONTI CORRENTI A CONSUMATORI, 1 03 CONTI CORRENTI A NON CONSUMATORI, 1.04 CONTO DI BASE,....) one-by-one.

Then for every product list create a file with the list of all the name of single product in the main product list.

I.e. (see screenshot above). Create a list every time the script works:

```
Main; Product
CONTI CORRENTI A CONSUMATORI; CONTO ORDINARIO CONSUMATORI "A PACCHETTO"
CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO ORDINARIO CONSUMATORI "A PACCHETTO
CONTI CORRENTI A CONSUMATORI:CONTO BPER
CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER
CONTI CORRENTI A CONSUMATORI; CONTO BPER+
CONTI CORRENTI A CONSUMATORI; DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER+
CONTI CORRENTI A CONSUMATORI; CONTO SPECIALE TITOLI ZERO
CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO SPECIALE TITOLI ZERO
CONTI CORRENTI A CONSUMATORI; CONTO BPER GIOVANI 13-17
CONTI CORRENTI A CONSUMATORI DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER GIOVANI 13-17
CONTI CORRENTI A CONSUMATORI;CONTO PENSIONE PER MINORI
CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO PENSIONE PER MINORI
CONTI CORRENTI A CONSUMATORI; CONTO BPER PROVA EDIZIONE LIMITATA
CONTI CORRENTI A CONSUMATORI:DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER PROVA EDIZIONE LIMITATA
CONTI CORRENTI A CONSUMATORI;CONTO BPER PLUS
CONTI CORRENTI A CONSUMATORI; DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER PLUS
CONTI CORRENTI A CONSUMATORI; CONTO BPER PRIVATE
CONTI CORRENTI A CONSUMATORI:DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER PRIVATE
CONTI CORRENTI A CONSUMATORI;FASCICOLO SERVIZI ACCESSORI
```

For each line of the main product list (i.e. CONTO ORDINARIO CONSUMATORI "A PACCHETTO"):

- E) First option . When the script run the main list is created :
 - 7) Check if the product exists in the main list compared with the previous available one
 - 8) If exists get the products name (i.e. CONTO ORDINARIO CONSUMATORI "A PACCHETTO) one-by-one and download the file in the proper folder (folder tree for download BPER/PPRIVATI/FOGLI_INFORMATIVI) and with the proper filename. Filename must be: YYYYMMDD-CompanyName-Segment-ProductName.OriginalFileExtension (usually pdf) i.e.: 20201130-BPER-PRIVATI- CONTO ORDINARIO CONSUMATORI "A PACCHETTO.pdf
- F) Second option. When the script run the main list is created:
 - If the file doesn't t exist <u>but was existing</u> in the previous main list write out NAA (not available anymore) => see OUTPUT phase below
 - 4) If the file doesn't t exist <u>and was not existing</u> in the previous list write out NEW (new document available) => see OUTPUT phase below

- g) If the file has been downloaded (that s to say exist) check if any difference exists compared with the previous version downloaded.
- h) If the file is NEW no difference must be performed
- i) If the file is NAA no difference must be performed

The output according with the previous eventualities is an excel file.

If [case a) above] the file is changed:

- 5. If nothing is changed output code is "no-change"
- 6. If something is changed output code is "changed" and a text file is created with all the text is changed. The txt filename is:

YYYYMMDD-CompanyName-Segment-ProductName-DIFF.txt

i.e.:

20201130-BPER-PRIVATI- CONTO ORDINARIO CONSUMATORI "A PACCHETTO -

DIFF.txt

Each part of the changed content must be divided by a line or however it must be identifiable

If [case b) above] the file is NEW: the output code is NEW

If [case c) above] the file is NAA: the output code is NAA

i.e. :

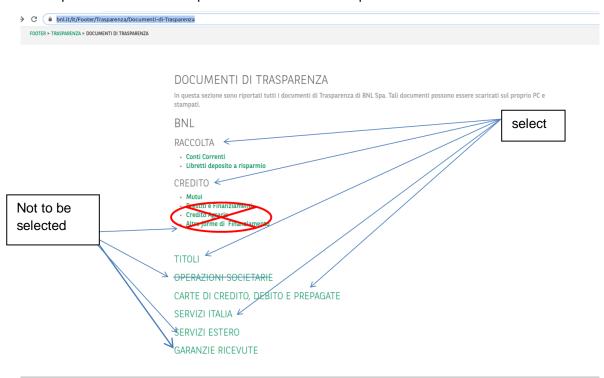
COMPANY	DATE	SEGMENT	MAIN PRODUCT	PRODUCT	CODE
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;CONTO ORDINARIO CONSUMATORI "A PACCHETTO"	no-change
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO ORDINARIO CONSUMATORI "A PACCHETTO	no-change
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;CONTO BPER	no-change
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER	no-change
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;CONTO BPER+	NEW
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO BPER+	NAA
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;CONTO SPECIALE TITOLI ZERO	NAA
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;DOCUMENTO INFORMATIVO SULLE SPESE (FID) - CONTO SPECIALE TITOLI ZERO	changed
BPER	20201130	PRIVATI	CONTI CORRENTI	CONTI CORRENTI A CONSUMATORI;CONTO BPER GIOVANI 13-17	changed

For the difference output see INTESA above.

URL 4: company name BNL

PHASE 1 - CHECK & DOWNLOAD

url: https://bnl.it/it/Footer/Trasparenza/Documenti-di-Trasparenza



First level of selection. All the line in list must be selected. In the above screenshot suppose to select "Conti Correnti".

Not the whole list of line available must be checked and downloaded. Below the list of product line to be processed:

CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO

CONTO BNL X TENNIS

CONTO TELEPASS PAY X

CONTI GAMMA PRIORITY

CONTO LIFE BANKER

CONTI DI BASE

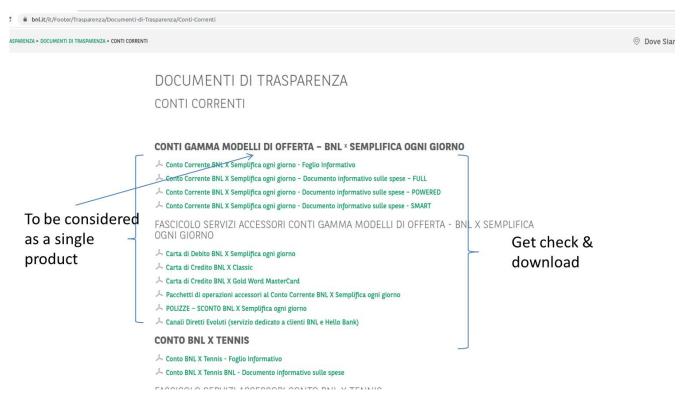
CONTO HELLO MONEY

CONTO ORDINARIO

CONTI DEDICATI AI PENSIONATI

ALTRI CONTI CORRENTI DEDICATI A FAMIGLIE E PRIVATI

All of the above secondary product list are the merge of two levels. See the below screenshot



Open every main product list (1 02 CONTI CORRENTI A CONSUMATORI, 1 03 CONTI CORRENTI A NON CONSUMATORI, 1.04 CONTO DI BASE,....) one-by-one.

Then for every product list create a file with the list of all the name of single product in the main product list.

I.e. (see screenshot above). Create a list every time the script works:

Main; Product

CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; Conto Corrente BNL X Semplifica ogni giorno - Foglio Informativo CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; Conto Corrente BNL X Semplifica ogni giorno – Documento informa

CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; Conto Corrente BNL X Semplifica ogni giorno – Documento informativo sulle spese – FULL

CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; Conto Corrente BNL X Semplifica ogni giorno - Documento informativo sulle spese – POWERED

CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; Conto Corrente BNL X Semplifica ogni giorno - Documento informativo sulle spese - SMART

CONTI GAMMA MODELLI DI OFFERTA - BNL X SEMPLIFICA OGNI GIORNO; Carta di Debito BNL X Semplifica ogni giorno

CONTI GAMMA MODELLI DI OFFERTA - BNL X SEMPLIFICA OGNI GIORNO; Carta di Credito BNL X Classic

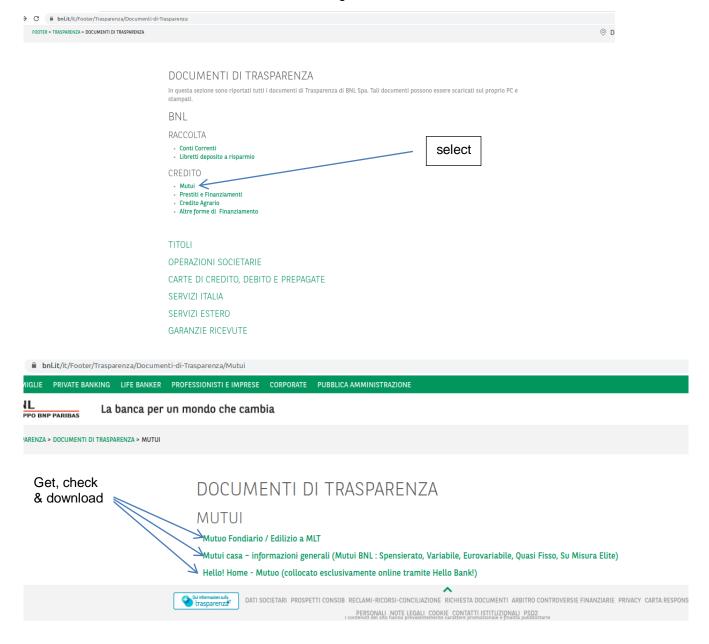
CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; Carta di Credito BNL X Gold Word MasterCard

CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; Pacchetti di operazioni accessori al Conto Corrente BNL X Semplifica ogni giorno

CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO; POLIZZE – SCONTO BNL X Semplifica ogni giorno

CONTI GAMMA MODELLI DI OFFERTA - BNL X SEMPLIFICA OGNI GIORNO; Canali Diretti Evoluti (servizio dedicato a clienti BNL e Hello Bank)

If a second level doesn't exist the main level must be get instead. I.e.:



Main:Product

MUTUI; Mutuo Fondiario / Edilizio a MLT

MUTUI; Mutui casa – informazioni generali (Mutui BNL : Spensierato, Variabile, Eurovariabile, Quasi Fisso, Su Misura Elite) MUTUI; Hello! Home - Mutuo (collocato esclusivamente online tramite Hello Bank!)

For each line of the main product list (i.e. "CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO"):

- G) First option . When the script run the main list is created :
 - 9) Check if the product exists in the main list compared with the previous available one
 - 10) If exists get the products name (i.e. CONTI GAMMA MODELLI DI OFFERTA BNL X SEMPLIFICA OGNI GIORNO) one-by-one and download the file in the proper folder (folder tree for download BNL/PPRIVATI/FOGLI_INFORMATIVI) and with the proper filename. Filename must be: YYYYMMDD-CompanyName-Segment-ProductName.OriginalFileExtension (usually pdf)
 - i.e.: 20201130-BNL-PRIVATI- CONTI GAMMA MODELLI DI OFFERTA BNL X SEMPLIFICA OGNI GIORNO.pdf
- H) Second option. When the script run the main list is created :
 - 5) If the file doesn't t exist <u>but was existing</u> in the previous main list write out NAA (not available anymore) => see OUTPUT phase below
 - 6) If the file doesn't t exist <u>and was not existing</u> in the previous list write out NEW (new document available) => see OUTPUT phase below

- j) If the file has been downloaded (that s to say exist) check if any difference exists compared with the previous version downloaded.
- k) If the file is NEW no difference must be performed
- I) If the file is NAA no difference must be performed

The output according with the previous eventualities is an excel file.

If [case a) above] the file is changed:

- 7. If nothing is changed output code is "no-change"
- 8. If something is changed output code is "changed" and a text file is created with all the text is changed. The txt filename is:

YYYYMMDD-CompanyName-Segment-ProductName-DIFF.txt

i.e.:

20201130-BNL-PRIVATI- CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO -DIFF.txt

Each part of the changed content must be divided by a line or however it must be identifiable

If [case b) above] the file is NEW: the output code is NEW

If [case c) above] the file is NAA: the output code is NAA

i.e.:

DATE	SEGMENT	MAIN PRODUCT	PRODUCT	CODE
20201130	PRIVATI	CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO	Conto Corrente BNL X Semplifica ogni giorno - Foglio Informativo	no-change
20201130	PRIVATI	CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO	Conto Corrente BNL X Semplifica ogni giorno – Documento informativo sulle spese – FULL	changed
20201130	PRIVATI	CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO	Conto Corrente BNL X Semplifica ogni giorno - Documento informativo sulle spese – POWERED	NAA
20201130	PRIVATI	CONTI GAMMA MODELLI DI OFFERTA – BNL X SEMPLIFICA OGNI GIORNO	Conto Corrente BNL X Semplifica ogni giorno - Documento informativo sulle spese - SMART	NEW

For the difference output see INTESA above.