	BP Data Checker Installation guide	
		Version: 2018-05-04 (1.0/002)

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1. BP Checker installation description

PRODUCT ID (uppercase letters, max 9 characters):	`BPCHECK`
Product's name	BP Data Checker – checking BP partner names and address data

BP Data Checker extends standard SAP system functionality by allowing checking directly from SAP names and address data of business partners. The data is checked against REGON/ VIES databases. BP Data Checker consist of two parts: a service provided by SNP Poland (web service) and a software product (ABAP part) in the SAP system.

Capabilities of BP Data Checker:
- **Checking business partners name (vendors/ customers/ BP)**
- **Checking business partners address data**
- **Checking Polish/EU VAT ID consistency**
- **Automation of vendor/customer master data creation (checking name, address data and VAT activity *, checking for VAT ID duplicates)**
- **providing API (function modules) to be used in own coding**

* only using integration with NIP Checker product

Basic transactions in BP Data Checker:

Transaction ID	Description
/BCC/JPB	BP Data Checker – starting checks and viewing checks logs
/BCC/JPB1	BP Data Checker – checking history
/BCC/JPB2	BP Data Checker – checking single business partner/ creating vendor/ customer
/BCC/JPBC	BP Data Checker – configuration
/BCC/JPBE	BP Data Checker – excluded strings
/BCC/JPBD	BP Data Checker – exchanged strings

1.1. Technical prerequiements

| Component	Recommended version
Kernel	6.0 or higher

Product created by BCC uses additional namespace which was prepeared especially for BCC - /BCC/JPB.

1.2. Installation of BP Data Checker solution

BP Data Checker solution installation consist of following steps:
- importing solution transport requests
- simple configuration in one configuration table
- opening the HTTPS connection to SNP Poland

The product requires communication to BP Data Checker service hosted in SNP Poland data centers
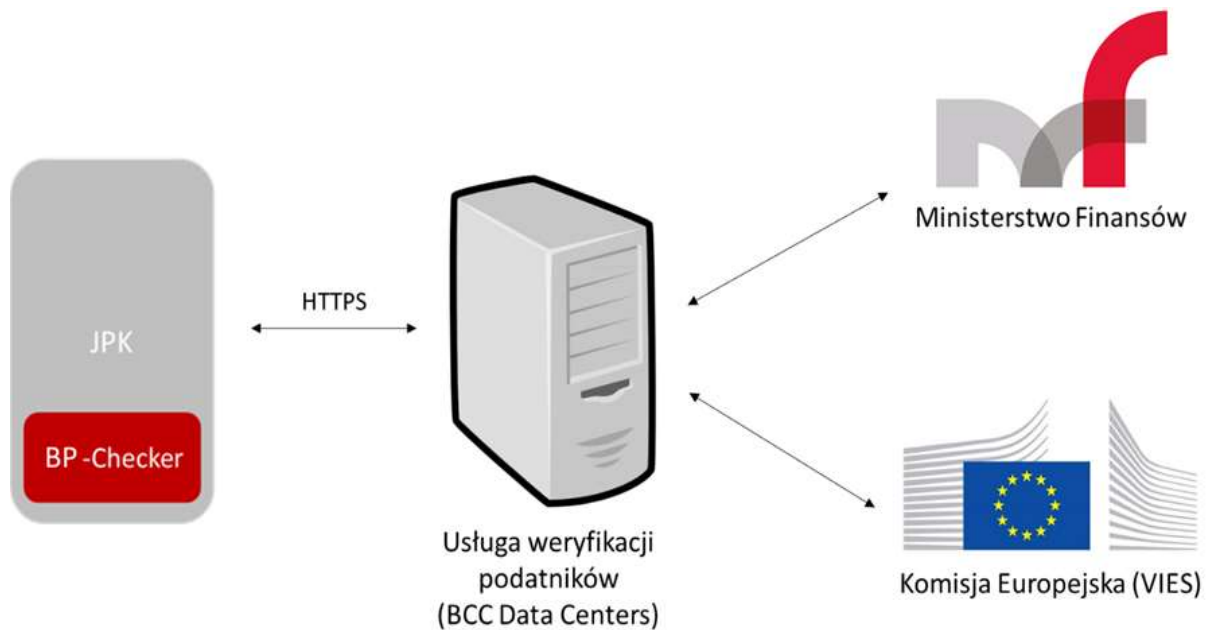
2. Installation steps

Step 1. Importing transport requests dedicated for BP Data Checker solution

Action	Details
Please import following transport requests in specified order: **1. BP Data Checker Base** **2. BP Data Checker Update** **3. BP Data Checker Default Configuration** **4. BP Data Checker Authorization Roles (Role uprawnień Z_JPB_ADMIN i Z_JPB_USER)** Important! In transport configuration it could be necessary to set these options: **Overwrite originals** **Ignore invalid component version.**	Objects included in transport: Package R3TR DEVC /BCC/JPB Roles: Z_JPB_USER, Z_JPB_ADMIN

Step 2. Enable connection between SAP and BP Checker service

BP Data Checker is connecting with BP Data Checker/ NIP Checker service server in direct mode (by HTTPS connection):

1. `https://services-jpk.bcc.com.pl:334/`

To work in direct mode you need to provide a connection between SAP application server and BCC service (possibly by proxy). Connection can be tested with transaction SE37, by testing function module HTTP_POST with:

- Check the checkbox Uppercase/Lowercase,
- URL (parameter ABSOLUTE_URI) https://services-jpk.bcc.com.pl:334/ and optionally inserting proxy data. Value 405 of return parameter STATUS_CODE means correct connection.

Indirect connection by additional Transfer Engine server is an alternative solution. That setting was described in separated JPK Transfer installation guide.

Step 3. BP Data Checker configuration

Fill-in BP Data Checker configuration table according to configuration key's description based in following table. Configuration changes should be done in SAP development system and then transported with transport request to the SAP productive system. Make configuration changes in transaction **/n/BCC/JPBC**.

BP Checker - configuration table		
Configuration key	Sequence	Configuration key value
CACHE_VALIDITY	0	0
CHECK_PACK_SIZE	0	100
DUPLIC_CHECK_DEF	0	X
FILTER_COMP_CODE	0	X
ID	0	
IGNORE_PESEL	0	X
REMOVE_DOMESTIC_PREF	0	S
RESULT_DELETE_DAYS	0	356
SHOW_BP	0	X
SHOW_EXIT	0	
SHOW_FILE	0	X
SHOW_MD_CREATE	0	X
SHOW_VEND_CUST	0	X
VATNO_PL_FORMAT	0	_ _ _ _ _

Example of product configuration (transaction /n/BCC/JPBC)

Important! For each *Configuration Key* sometimes it is possible to insert more than one value. In that case it is necessary to insert next natural values in Order column.

Table containing description of configuration entries in BP Data Checker solution.

Configuration key ID	Description
ID	**Parameter required:** Define the user of BP Data Checker service Can be given directly (for all Company Codes) e.g.: ID 99999 or for given company code e.g.: ID Y001|99999 Important! For testing one can add prefix "test" to ID value (e.g. test99999). Then, when testing, no check limit will be consumed, but real checks will be very limited. This prefix should not be used for normal BP Data Checker operation.
ID2	**Parameter required:** Define the user's code for the BP Data Checker service. Can be given directly or for a given company code as the ID parameter. Important. This parameter is hidden by the program with first use. If new ID2 parameters are to be added to configuration, then all previous parameters should be given once more as well, while otherwise, the program will "forget" the previous values when hiding the new one.
VATNO_IGNORE	**Parameter usually required:** Define validation sequence included in VAT number that will be omitted (omitted during validation). Example: EMPTY Empty empty

BP_CHECK_TYPE	**Important optional parameter.** Defines in which manner vendor's, receiver's or partners VAT ID will be read.
	Valid possibilities:
	   1) Tax ID from master data tables LFA1/KNA1-STCEG
	   2) Tax ID from master data tables LFA1/KNA1-STCD1
	   3) Tax ID from master data tables LFA1/KNA1-STCD2
	   4) Tax ID assigned to Poland from tables LFAS/KNAS-STCEG
	   5) Tax IDs assigned to different countries from tables LFAS/KNAS-STCEG
	   6) Tax ID from business partner master data from z code defined with parameter BP_CHECK_ID1 (default PL1).
	   7) Tax ID from business partner master data from z code defined with parameter BP_CHECK_ID2 (default PL2).
	   8) Tax ID from business partner master data from z codes other than defined with parameter BP_CHECK_ID1 and BP_CHECK_ID2.
	   9) Tax ID for BP from vendor assigned to business partner (according to rules 1-5)
	  10) Tax ID for BP from customer assigned to business partner (according to rules 1-5)
	Parameter should be 10 characters sequence of „0" and „1" where „0" means that nothing will be taken and „1" means adding value to checking list.
	Default value 1101011011 .

	See also user exits ZX_BCC_JPN_TN4C, ZX_BCC_JPN_TN4V, ZX_BCC_JPN_TN4B (and respective function modules /BCC/JPB_OTH_UEXIT_TN4C, /BCC/JPB_OTH_UEXIT_TN4V, /BCC/JPB_OTH_UEXIT_TN4B). With these extensions one can modify or completely change the logic of reading TAX IDs for Customers (C), Vendors (V) and Business Partners (B). These extensions are described in user's manual.
CONN_HTTP_PROXY	**Optional parameter. Parameter usually used by direct connection.** It determines proxy server which is used by connection (it could be defined in BP Data Checker or globally for all http connection in SAP system).
CONN_HTTP_PROXY_PASS	**Optional parameter. Parameter usually used by direct connection.** Password required to proxy server (see parameter CONN_HTTP_PROXY).
CONN_HTTP_PROXY_USER	**Optional parameter. Parameter usually used by direct connection.** User of proxy server (see parameter CONN_HTTP_PROXY).
CONN_HTTP_RFCDEST	**Optional parameter. Parameter usually used by direct connection.** Usually not used. It defines connection RFCDEST which is used by direct connection HTTP_POST, HTTP_GET. If not declared, SAP system uses default value (usually SAPHTTPA).
FILE_DEF_PATH	**Optional parameter.** Default XML JPK_VAT file path that is used in transaction /n/BCC/JPB for XML file default settings. Parameter could be declared single-handedly or separately for each business entity. Example: 0001|\\office\bcc\ProjektyWewnetrzne\JPK\XML Y001|\\sato\JPK\XML D:\JPK\XML Third entry would be used if business entity is not declared or business entity is different than 001 and Y001.
FILE_DEF_SAP	**Optional parameter.** Define if the path with FILE_DEF_PATH parameter is based on workstation or application server. Possibilities: X – application server path – (empty value) – workstation path Example: X
FILE_DEF_XML_ATTR	**Optional parameter.** Define attribute of XML file that includes JPK_VAT file with tax IDs. Default value: „ContractorNo". Example: ContractorNo
ICON_FOR_EXEMPTED	**Optional parameter.** Define how *exempted* result would be presented (icon). Possible values: R – red icon Y – yellow icon G – green icon

	N – grey icon Default value is Y.
ICON_FOR_IGNORED	**Optional parameter (recommended to be set to N).** Define how *ignored records* will presented (icon). Possible values: R – red icon Y – yellow icon G – green icon **N – grey icon (recommended value)** Default value is G.
CACHE_VALIDITY	**Optional parameter.** Numeric value that indicates how long tax ID won't be rechecked. Value "0" means that tax ID will be rechecked once a day at most. Value „20" means that tax ID will not be rechecked more often than once in 22 days. Value „-1" means that CACHE is not allowed. "1000" means CACHE within one calendar month In case of not declaring this parameter, default value is „0". Example and recommendation: "0".
URL_CHECK_PRD	**Optional parameter.** Determines URL address of BP Data Checker productive service. Default value: `https://services-jpk.bcc.com.pl:334/`
URL_CHECK_TST	**Optional parameter.** Determines URL address of BP Data Checker quality service. Default value: `https://services-jpk.bcc.com.pl:334/`
LOCK_VALIDITY	**Optional parameter.** Determines time when blockade's entries which are used by BP Data Checker will be deleted automatically. Unit is one second. Default value 900 equals 15 minutes.
BP_CHECK_ID1	**Optional parameter.** Important when using Business Partners. Sets Tax ID (1), which will be read from partner master data for Poland. Default PL1.
BP_CHECK_ID2	**Optional parameter.** Important when using Business Partners. Sets Tax ID (2), which will be read from partner master data for Poland. Default PL2.
IGNORE_PESEL	**Optional parameter.** If set (X), makes BP Data Checker to ignore valid PESEL numbers. Default value: empty.
USE_JPN_AUTH_OBJECT	**Optional parameter.** Sets (X), the checking of a special /BCC/JPB authorization object for a chosen Company Code. If not set (empty value), then instead, the standard authorization objects F_LFA1_BUK, F_KNA1_BUK with ACTIVITY 03 (Display) are checked for a chosen company code. Default value: empty
SHOW_BP	**Optional parameter.** Sets (X), whether in transaction /n/BCC/JPB section allowing Business Partner checking is shown (**important for S/4 HANA**). By default empty (not shown).

SHOW_EXIT	**Optional parameter.** Sets (X), whether in transaction /n/BCC/JPB section allowing BP Data checking for selection programmed in user exit is shown. By default empty (not shown).
SHOW_FILE	**Optional parameter.** Sets (X), whether in transaction /n/BCC/JPB section allowing BP Data checking JPK VAT file should be visible.
SHOW_NIPC	**Optional parameter.** Sets (X), whether in transaction /n/BCC/JPB section allowing integration with NIP Checker solution.
SHOW_VEND_CUST	**Optional parameter. Sets (X),** whether in transaction /n/BCC/JPB section allowing Vendors/ Customers checking is shown (**important for classic ERP**). By default X (shown).
SHOW_MD_CREATE	**Optional parameter. Sets (X),** whether in transaction /n/BCC/JPB2 section allowing creation of Vendor/ Customer is shown.
TRANS_JPB1	**Optional parameter.** Sets the transaction ID for the transaction called when „One TAX ID history" in transaction /n/BCC/JPB. By default /BCC/JPB1.
TRANS_LO_B	**Optional parameter.** Sets the transaction ID for the transaction called when icon "lock" for business partner is shown. By default BP.
TRANS_LO_C	**Optional parameter.** Sets the transaction ID for the transaction called when icon "lock" for customer is shown. By default FD05.
TRANS_LO_V	**Optional parameter.** Sets the transaction ID for the transaction called when icon "lock" for vendor is shown. By default FK05.
TRANS_MD_B	**Optional parameter.** Sets the transaction ID for the transaction called when icon "lock" for business partner is shown. By default BP.
TRANS_MD_C	**Optional parameter.** Sets the transaction ID for the transaction called when icon "master data" for customer is shown. By default FD02.
TRANS_MD_V	**Optional parameter.** Sets the transaction ID for the transaction called when icon "master data" for vendor is shown. By default FK02.
RESULT_DELETE_DAYS	**Optional parameter.** Sets the delay in days after which checks data is removed from detail results table. Setting value -1 means the data will not be deleted automatically. Default value 365.
CHECK_PACK_SIZE	**Optional parameter.** Sets the package size for VAT number checking in BCC service. By default the package size is 300. If you encounter timeouts, or 102/103 errors, try setting this parameter to smaller value (e.g. 100 or 50 or 25).
FILTERED_USAGE	**Optional parameter.** Sets the usage type that by default is not displayed in transactions /BCC/JPB i /BCC/JPB1.
FILTER_COMP_CODE	**Optional parameter.** When set (X) logs are filtered by comapny code given /BCC/JPB (normally the CC is used only to filter business partners)

REMOVE_DOMESTIC_PREF	**Optional parameter.** When set the PL prefix from Polish EU VAT ID is removed and such an ID is treated as Polish country VAT ID (e.g. NIP PL7831007209 => 7831007209). Value S means showing of this parameter on selection screen of transaction /BCC/JPN. Example values (X, S, XS).
INCL_REGION_IN_STAT	**Optional parameter.** When set (X) then REGIO field will be taken into account in comparison.
MAN_WEBPAGE	**Optional parameter.** URL of webpage called ahen buton „Manual check on WWW" is pressed.
VATNO_PL_FORMAT	**Optional parameter used in transaction /BCC/JPB2.** SETS local (Polish NIP format). E.g.: ___-___-__-__
SHOW_DUPLIC_CHECK	**Optional parameter used in transaction /BCC/JPB2.** When set the selection parameter checkbox for checking of duplicates is shown.
DUPLIC_CHECK_DEF	**Optional parameter used in transaction /BCC/JPB2.** When checked then by default duplicate checking is switched on.

Adding deleted or exchanged substrings (for comparison). Optional activity

In transaction **/BCC/JPBE i /BCC/JPBD** substrings that are deleted or exchanged during comparison are maintained. They are predefined with the product. One can adjust them using the alphanumeric *order* field (e.g. Z01).

3. SAP user's authorizations for BP Data Checker solution

3.1. BP Data Checker user's authorization

The role is provided with the transport request (can be created automatically).

3.2. Authorization of BP Data Checker administrator who can change configuration tables in SAP system

The role is provided with the transport request (can be created automatically).

4. Procedure of updating BP Data Checker (only for updating previously installed version of BP Data Checker).

Steps:
1. Updating BP Data Checker solution
   a. Log out from BP Data Checker transaction
   b. Load new transport files (usually the base solution 1) does not need to be updated)
   c. Consider using new configuration parameters which were described in section 1.3 (if exists)
   d. Verify if authorizations which are required by the new version are not greater than authorizations required by previous version. Make an update of user's authorizations if necessary (section 3).

5. Additional information

More information about BP Checker could be found in user guide and in Addons by SNP forum:
https://addons.snp-poland.com