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## Technical Articles



**Lars Hvam**

September 28, 2020 1 minute read

# Standalone editing of ABAP in vscode

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With [ABAP code versioned in git](#), it is possible to clone ABAP projects as files to the local PC. And like other files, these can be edited with your [favorite editor](#).

To help the developer, I've been working on a ***standalone*** setup for editing ABAP files based on [LSP](#) and [vscode](#).

Below shows some of the features currently implemented,

## Diagnostics

```
zcl_abapgit_hash.clas.abap ●
79
80 METHOD sha1.
81
82     DATA: lv_len      TYPE i,
83            lv_char10   TYPE c LENGTH 10,
84            lv_string   TYPE string,
85            lv_xstring  TYPE xstring.
86
87
88     lv_len = xstrlen( iv_data ).
89     lv_char10 = lv_len.
90     CONDENSE lv_char10.
91     CONCATENATE iv_type lv_char10 INTO lv_string SEPARATED BY space.
92     lv_xstring = zcl_abapgit_convert=>string_to_xstring_utf8( lv_string ).
93
94     lv_string = lv_xstring.
95     CONCATENATE lv_string '00' INTO lv_string.
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   Filter (e.g. text, \*\*/\*.ts, !\*\*/node\_modules/\*\*)

No problems have been detected in the workspace so far.

Go to definition

```
zcl_abapgit_hash.clas.abap ✕
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80 METHOD sha1.
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83            lv_char10   TYPE c LENGTH 10,
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91     CONCATENATE iv_type lv_char10 INTO lv_string SEPARATED BY space.
92     lv_xstring = zcl_abapgit_convert=>string_to_xstring_utf8( lv_string ).
93
94     lv_string = lv_xstring.
95     CONCATENATE lv_string '00' INTO lv_string.
96     lv_xstring = lv_string.
97
98     CONCATENATE lv_xstring iv_data INTO lv_xstring IN BYTE MODE.
99
100     lv_sha1 = sha1_new( lv_xstring )
```

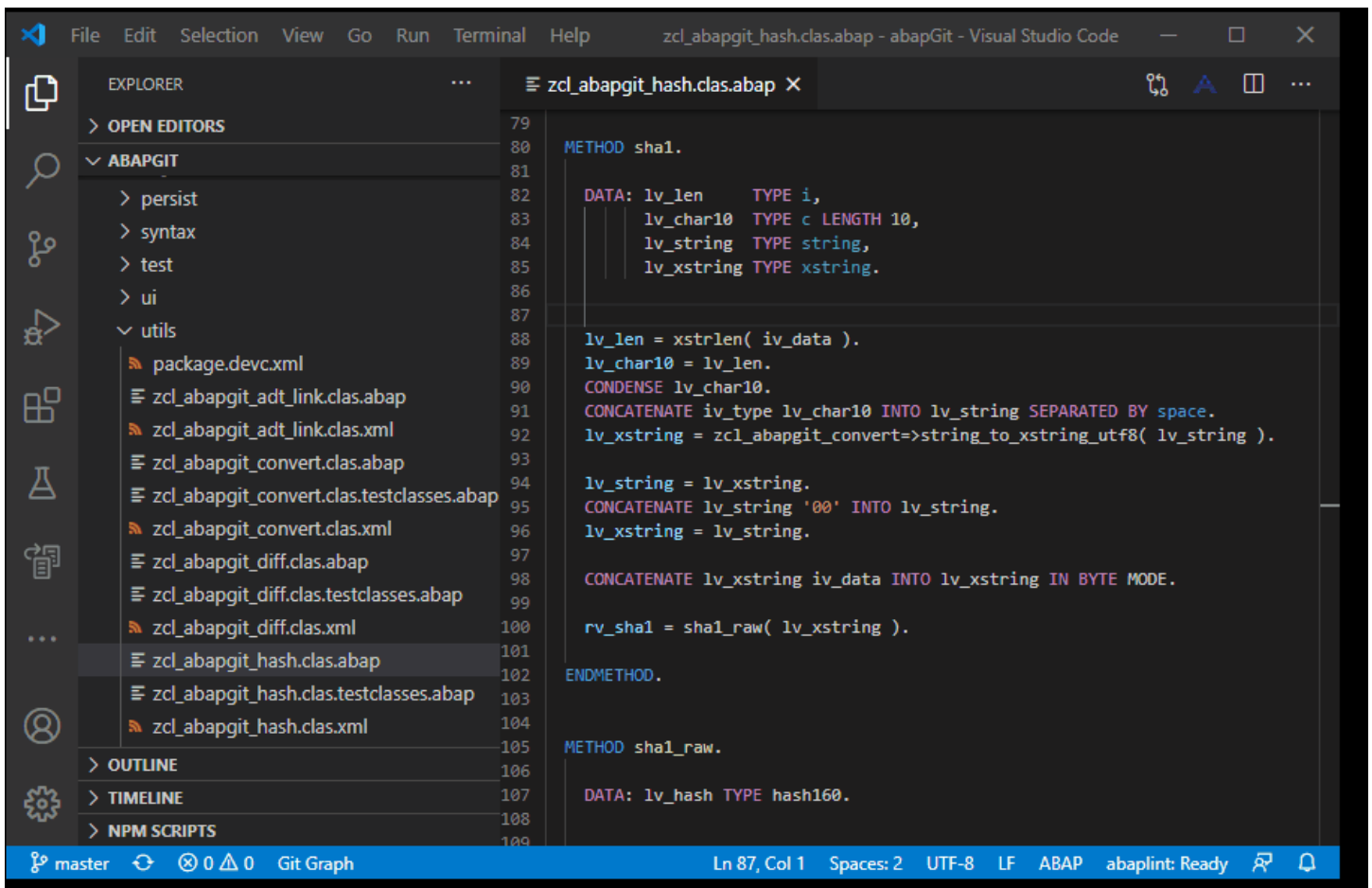
Hover

```
zcl_abapgit_hash.clas.abap X
79
80 METHOD sha1.
81
82     DATA: lv_len      TYPE i,
83           lv_char10    TYPE c LENGTH 10,
84           lv_string    TYPE string,
85           lv_xstring   TYPE xstring.
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88     lv_len = xstrlen( iv_data ).
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91     CONCATENATE iv_type lv_char10 INTO lv_string SEPARATED BY space.
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94     lv_string = lv_xstring.
95     CONCATENATE lv_string '00' INTO lv_string.
96     lv_xstring = lv_string.
97
98     CONCATENATE lv_xstring iv_data INTO lv_xstring IN BYTE MODE.
99
```

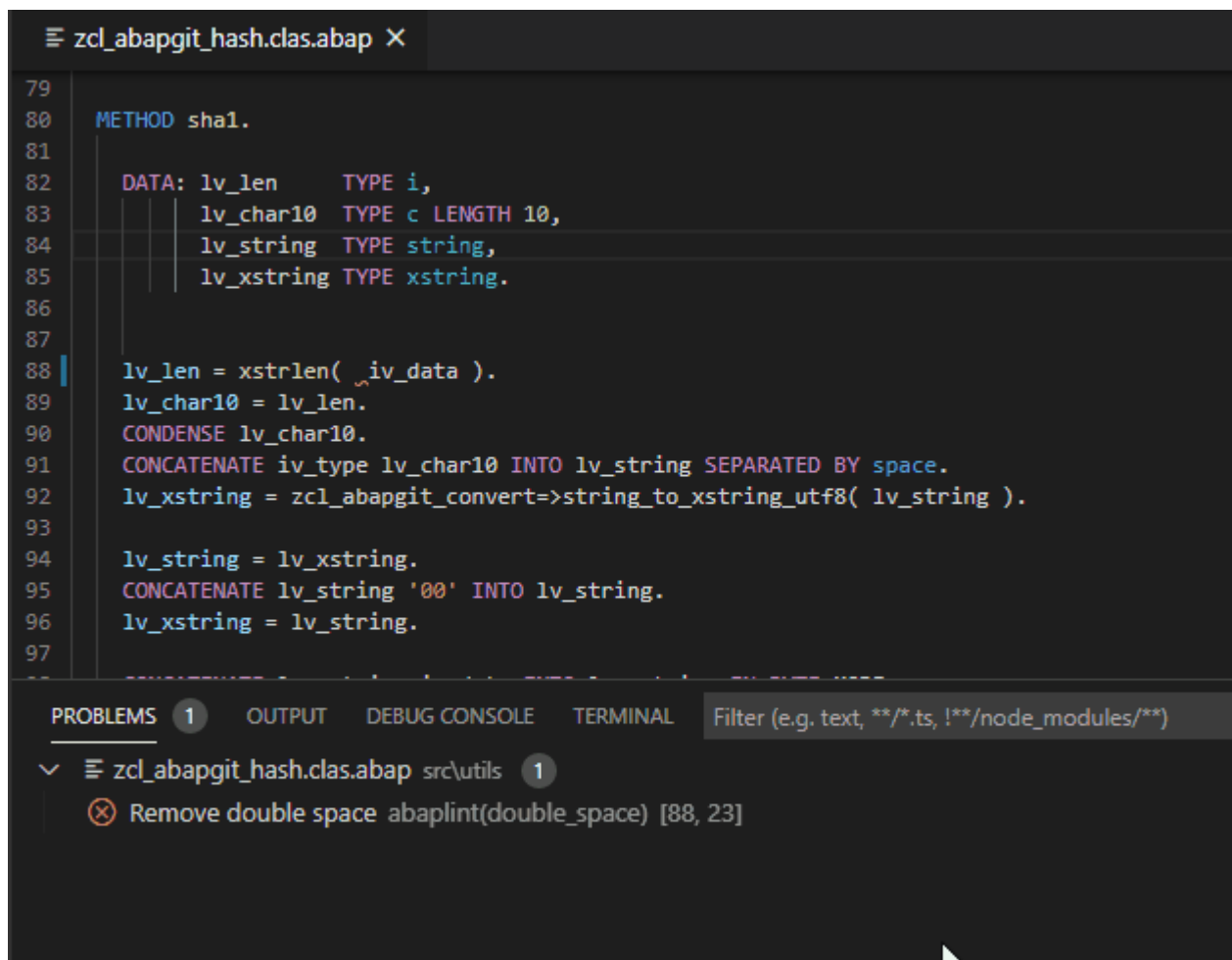
Rename

```
zcl_abapgit_hash.clas.abap X
79
80 METHOD sha1.
81
82   DATA: lv_len      TYPE i,
83          lv_char10   TYPE c LENGTH 10,
84          lv_string    TYPE string,
85          lv_xstring   TYPE xstring.
86
87
88   lv_len = strlen( iv_data ).
89   lv_char10 = lv_len.
90   CONDENSE lv_char10.
91   CONCATENATE iv_type lv_char10 INTO lv_string SEPARATED BY space.
92   lv_xstring = zcl_abapgit_convert=>string_to_xstring_utf8( lv_string ).
93
94   lv_string = lv_xstring.
95   CONCATENATE lv_string '00' INTO lv_string.
96   lv_xstring = lv_string.
97
98   CONCATENATE lv_xstring iv_data INTO lv_xstring IN BYTE MODE.
99
100  rv_sha1 = sha1_raw( lv_xstring ).
101
102 ENDMETHOD.
103
104
105 METHOD sha1_raw.
106
107   DATA: lv_hash TYPE hash160.
108
109
```

## References

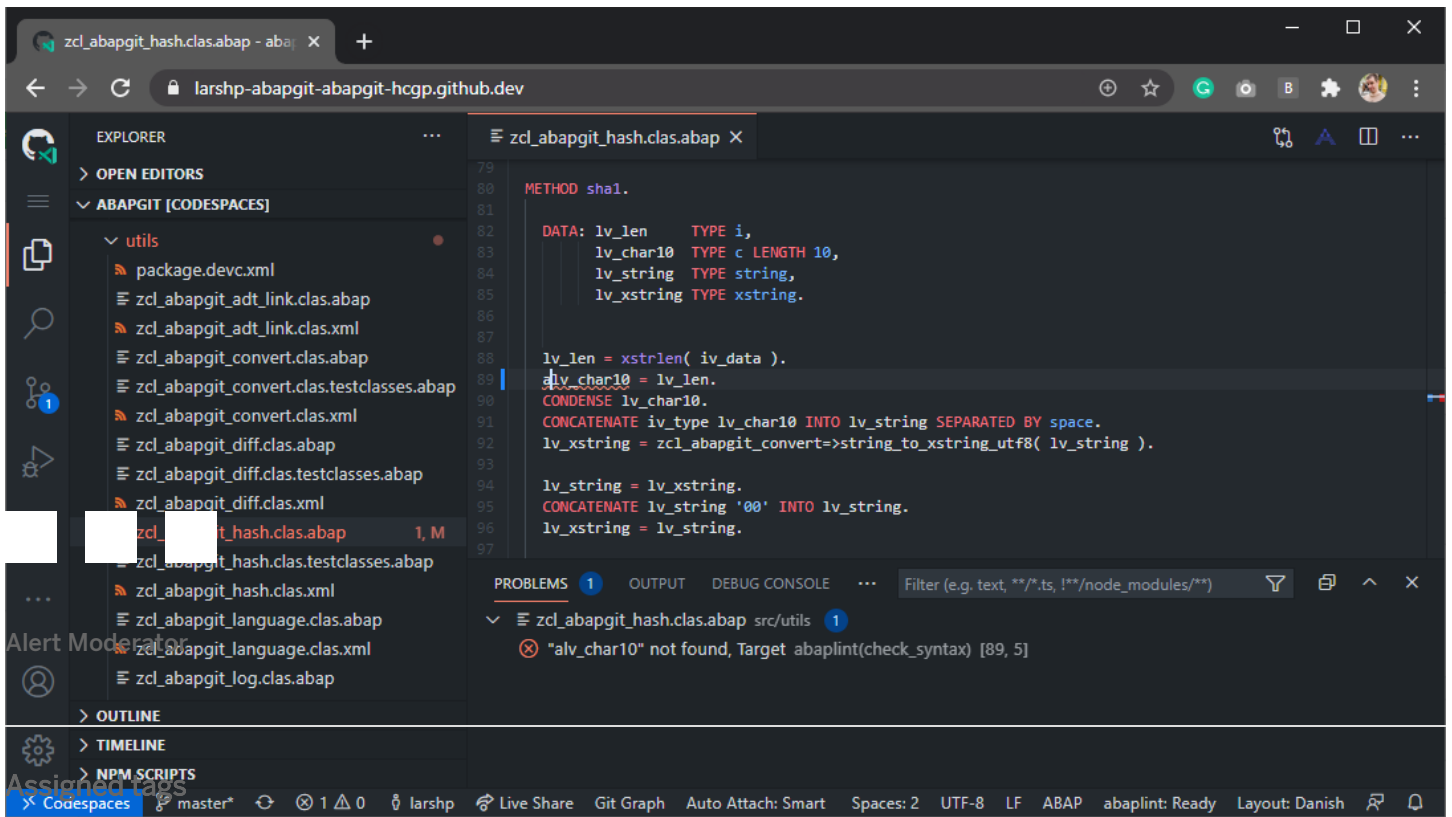
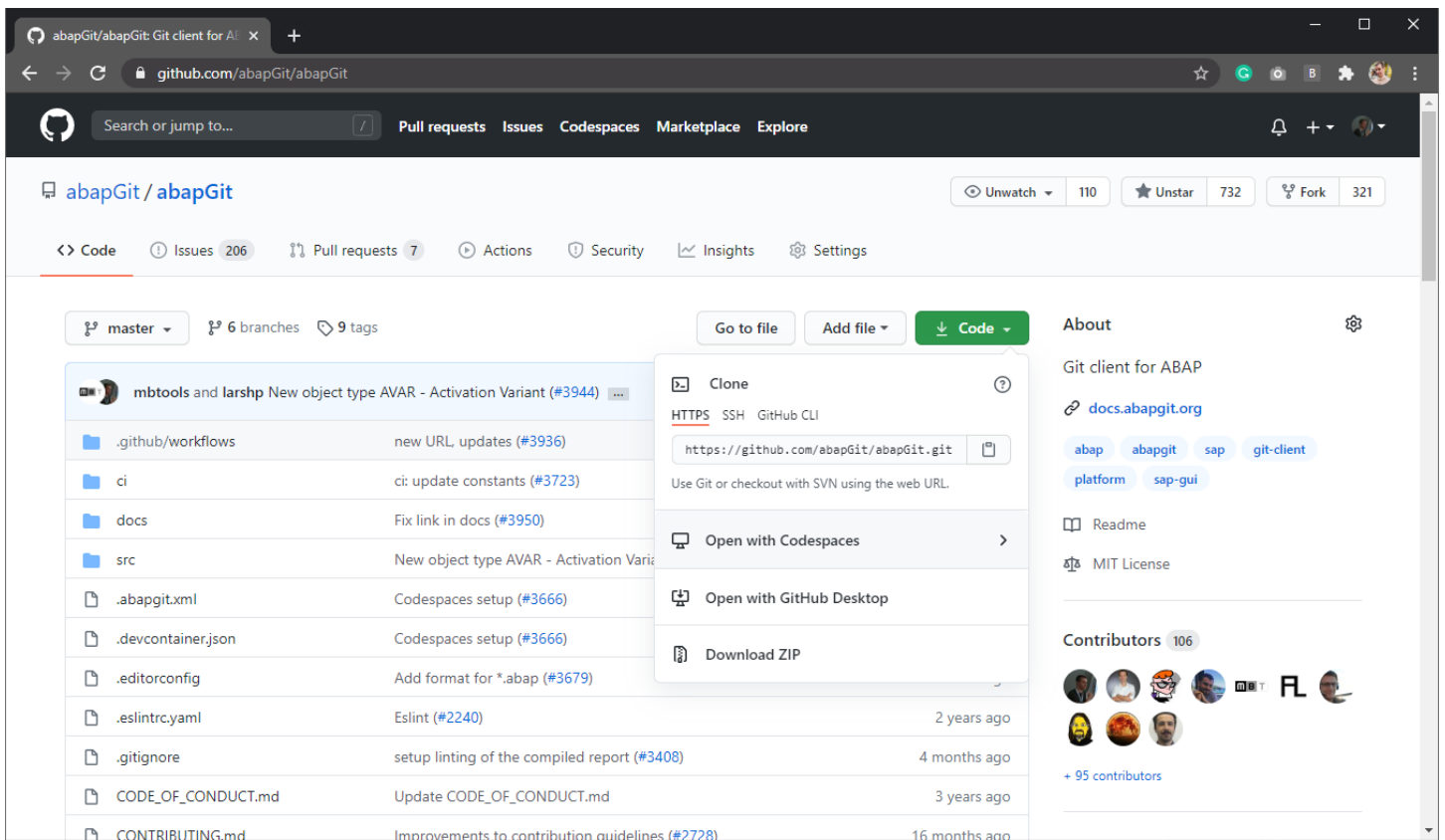


## Quick Fix



## GitHub Codespaces

All this also works with [Github Codespaces](#) running in the browser,



ABAP Development | #ABAP | #vscode |

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The abaplint extension is available from the [marketplace](#), or try the online [playground](#)



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Carine Tchoutouo Djomo



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Lars Hvam  3.5K  
ABAP linting, problems view, go to definition, find references, and quick fixes.  
★★★★★ FREE

lock

Bug reports and bugfixes welcome at <https://github.com/abaplint/vscode-abaplint>

By Former Member , Jul 20, 2006

mime objects are not displayed

By Former Member , Jul 13, 2006

Mission impossible? No, however, there will be a

lot of bugs, and it will always be two steps behind, just like most (any) developer tooling.

By Former Member , Feb 12, 2014

## 4 Comments



David Henn

September 28, 2020 at 3:09 pm

If you could now also implement a runtime for ABAP without the need for an application server... 😊

#freeABAP

Like (2) | Reply | Alert Moderator



Lars Hvam | Post author

September 28, 2020 at 4:50 pm

see <https://blogs.sap.com/2020/09/13/my-solution-to-the-abap-community-coding-challenge/>

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David Henn

September 29, 2020 at 7:12 am

...





Like (0) | Reply | Alert Moderator



Lars Hvam | Post author

September 28, 2020 at 4:53 pm

And btw, its MIT licensed

There is no typeahead, yet

The namespace for errors is configurable, in below an error is issued for SOMETHINGSOMETHING, but not for TY\_BAR. Things that are not known and outside the error namespace will become void, and everything for it trusted

The screenshot shows a web browser window at playground.abaplint.org. The editor has two tabs: /abaplint.json and /zfoobar.prog.abap. The code in the editor is:

```
1 REPORT zfoobar.  
2  
3 DATA foo TYPE ty_bar.  
4 WRITE foo.  
5 DATA moo TYPE somethingsomething.
```

A tooltip is visible over the word 'moo' in line 5, showing the following information:

- Variable definition
- Identifier: moo
- Type: Void(SOMETHINGSOMETHING)
- Contains void types
- Variable "moo" not used
- Peek Problem (Alt+F8) Quick Fix... (Ctrl+.)

At the bottom of the editor, two error messages are displayed:

```
/zfoobar.prog.abap[3, 6]: Type of "foo" contains unknown: TY_BAR not found, lookup(unknown_types)  
/zfoobar.prog.abap[5, 6]: Variable "moo" not used(unused_variables)
```

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